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STEP IN

THE FUTURE HAS ARRIVED

NAMO BHARAT

INDIA'S NEW-AGE MOBILITY

This is where rails meet reverie.
Where steel sings and cities breathe.
Where distance folds into minutes,
and tomorrow rides in on a quiet hum of possibility.

You are not just boarding a train,
you are stepping into time itself.
A time that runs smoother, cleaner, kinder.
A time imagined for the many, not just the few.

This is **Namo Bharat.**
Not just a marvel of engineering,
but a promise cast in motion.
A thread of silver that stitches Delhi to Meerut,
villages to voices, people to their pace.

Inside this book,
you will meet the pulse behind the power -
the visionaries, the believers, the designers, the builders.
You will travel across bridges, into tunnels,
and through moments where the future found its footing.

So turn the page,
feel the wind change.
Because what you hold in your hands is not just a book,
it is a boarding pass for a journey into Futuristic India.

In a monumental moment of national pride, the vision of a connected future of the National Capital Region, is no longer a dream but a dynamic reality.

Namo Bharat, a triumph of engineering, stands as a testament to the collective resolve and unwavering commitment that brought it to life, not just on time, but with unparalleled efficiency.

GatiShakti Bhawan, NCRTC Corporate Office

ABOUT US

National Capital Region Transport Corporation (NCRTC),
a joint venture company of the Government of India and States of
NCT of Delhi, Haryana, Rajasthan and Uttar Pradesh, is mandated
for implementing the Regional Rapid Transit System (RRTS) project
across the National Capital Region (NCR), ensuring
a balanced and sustainable urban development through
better connectivity and access.

RRTS would open up new markets and opportunities for
people across commute distances which appear infeasible today.

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OUR VALUES

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INTEGRITY

Behaving honourably
even when no one is watching
and following moral and ethical
principles in all aspects of life.

COLLABORATION

Listening and evolving together,
helping and supporting each other
for the sake of our collective goal.

CUSTOMER FOCUS

Being able to put the customer's needs first for enhanced customer satisfaction.

OWNERSHIP

Volunteering responsibility for projects and seeing our own tasks through to completion. As members of the organisation, it is important for us to see how we all contribute to its vision; owning our work shows us our value in the team.

CONTINUOUS LEARNING

Constant efforts towards personal and professional growth. Along with acquiring new skills, it is about learning from our experiences and seeing failure as a path to success.

सत्यमेव जयते

"It is heartening to learn about the remarkable progress in the implementation of the Namo Bharat project. I extend my heartiest congratulations and best wishes to the National Capital Region Transport Corporation (NCRTC) and all stakeholders, particularly the dedicated 'Shramjeevis' associated with this initiative that will connect Delhi-Ghaziabad-Meerut, along with Meerut Metro services.

The blend of cutting-edge technology, indigenous manufacturing and energy-efficient design aligns seamlessly with our vision of further strengthening infrastructure and seamless connectivity across regions.

Infrastructure has emerged as one of the key engines of India's economic growth. Over the past 11 years, large-scale investments in railways, roads, ports and airports have reshaped the country's development trajectory, improving ease of living and accelerating progress. Guided by sustainability and long-term vision, this next-generation infrastructure is laying the foundation for a self-reliant India.

Over the last decade, the government has rolled out forward-looking mobility initiatives, including modern highways and ropeways, Vande Bharat trains and comprehensive station redevelopment under the Amrit Bharat programme, among others, reflecting a decisive shift toward efficient, future-ready transport.

Namo Bharat marks yet another significant step towards decongesting urban areas and ushering in development across regions. This transit system promises a fast, safe, reliable, comfortable, sustainable and commuter-centric experience, building bridges of trust both in terms of distances and the aspirations of our people.

It is particularly heart-warming to note that the journey of the Namo Bharat project is being documented through the publication, "Namo Bharat - India's New-age Mobility."

May this book capture the hard work of our Shramjeevis and reflect the spirit behind the project."

Shri Narendra Modi

Hon'ble Prime Minister of India

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सत्यमेव जयते

"It gives me great personal satisfaction to see how far India has come in its journey of modern mobility. From 248 km across 5 cities in 2014 to over 1,013 km across 23 cities today, our progress reflects the collective effort and determination of countless committed to improving the lives of citizens.

With the commissioning of the first Namo Bharat corridor from Delhi to Meerut, we are witnessing yet another transformative milestone. I have closely followed this project, and I am confident that Namo Bharat will redefine regional mobility just as the Metro revolutionized urban travel. As the Hon'ble Prime Minister has said, Namo Bharat embodies modernity and speed and is "defining the new journey of New India and its new resolutions.

My sincere appreciation to NCRTC for their professionalism, technical excellence, and commitment. NCRTC has pioneered this mobility system which will ease our living, support economic growth, reduce pollution, and set new benchmarks for green, commuter-centric mobility – both nationally and globally. Namo Bharat truly reflects our vision of universally accessible, inclusive mobility, safety and comfort for women, senior citizens, children, and persons with disabilities. It is a project that will benefit generations to come.

I am pleased that the journey of India's first Namo Bharat has been beautifully captured in the coffee table book 'Namo Bharat - India's New-Age Mobility'. I am sure readers will be enthused by this journey as India progresses towards a Viksit Bharat 2047."

Shri Manohar Lal

Minister of Housing and Urban Affairs and Power,
Government of India

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सत्यमेव जयते

"It is a matter of great pride that India's first Namo Bharat corridor has now become a reality, heralding a new chapter in the country's transport and infrastructure journey. This modern, high-speed, and high-capacity system is designed to serve millions of people of the National Capital Region with efficiency, safety, and comfort.

Aligned with the goals of the Hon'ble Prime Minister's visionary Gati Shakti National Master Plan, Namo Bharat will play a pivotal role in driving multi-modal-integration, decongesting urban corridors, reducing environmental pollution, and unlocking balanced, sustainable and polycentric development across the metropolitan regions of a New India. The project is a true example of co-operative federalism where the Centre and the States of National Capital Region have come together to create the implementing agency, National Capital Region Transport Company, NCRTC. The project financing has also been uniquely engineered to ensure protection of financial interests of all the shareholders while ensuring timely implementation of the project.

I am glad that this remarkable journey has been documented in the book 'Namo Bharat – India's New-Age Mobility'. This book captures not just the project's key milestones, but also the spirit of transformation it represents for our country making rapid strides towards becoming one of the top 3 economies in the world.

I extend my appreciation to NCRTC and all stakeholders who have worked tirelessly to bring this ambitious vision to life. Their dedication has created a model of regional mobility that future projects across the country and beyond will look up to."

Shri Tokhan Sahu

Hon'ble Minister of State for Housing and Urban Affairs,
Government of India

"Urbanisation is at the core for realisation of the dream of Viksit Bharat. In pursuance of the above, a strategic plan to develop cities as growth hubs is being implemented. Balanced and cohesive development of these growth hubs requires integrated transport planning and multi-modal integration (MMI). It also requires attention to Greenfield development as well as revival of economic areas through Brownfield development. Hence, transit-oriented development (TOD) assumes significance.

The Delhi-Meerut Namo Bharat regional rail corridor has adopted MMI and TOD in its design philosophy apart from several other innovative initiatives. In keeping with the plan of growth hubs, it will go a long way in transforming the landscape of regional commute in the country. As an outcome of the implementation of TOD policy in the state of Uttar Pradesh, two greenfield cities are being planned. With this project not only semi-high-speed regional connectivity has become a reality, but its seamless integration with the other mass transit modes will encourage many more people to switch to public transport.

Apart from the support provided to the company by the shareholders, the project has been a recipient of financial assistance from multilateral banks – ADB, AIIB and NDB, through the Government of India. Not only that, finance plus elements from ADB have enabled setting up of an innovation lab within NCRTC. There has also been constant support from the various Ministries, regulators and oversight agencies in ensuring that the project is delivered efficiently.

The success of the Delhi-Ghaziabad-Meerut Namo Bharat corridor has indeed set a template for implementation of more such corridors in the National Capital Region, as well as similar regional rail corridors in other metropolitan regions across the country. This collection titled, '*Namo Bharat – India's New-Age Mobility*' truly captures the vision, the essence and the spirit of this transformative mobility solution.

I wish Team NCRTC, all glory and success in future too."

Shri Srinivas R Katikithala

Secretary,
Ministry of Housing and Urban Affairs, Government of India

and

Chairman,
National Capital Region Transport Corporation (NCRTC)

"Namo Bharat is a complex transport infrastructure project, with many technological advancements and new-age solutions being adopted in this project for the first time in India and globally as well. The construction for the Delhi-Meerut Namo Bharat corridor undertaken in congested and densely populated urban and semi-urban areas, mainly on the median of the road presented enormous challenges. Adopting the design speed of 180 kmph for the first time in India posed further challenges with regard to adopting new technologies suitable for such speed. The COVID-19 pandemic also severely impacted the supply chains during the construction phase of the project. However, this first-of-its-kind project has been completed within the targeted timeframe of six years.

The continuous support of the Central Government, State Governments, Ministries of Housing & Urban Affairs, Railways, Home Affairs, Road Transport & Highways, Department of Telecom, DPIIT, funding agencies, all the partners and other stakeholders has been very crucial for this successful implementation. Each member of the NCRTC team has toiled relentlessly to ensure that the vision of creating this transformational infrastructure is realised. I salute the dedication of my team that I am proud to lead.

Meticulous attention to detail and innovation which has gone in making Namo Bharat one of the most commuter-centric and efficient transit modes, will make it the first choice of commuters for comfortable regional transit in the years to come. All efforts have been made to create a network of networks by integrating different modes of transport, wherever possible. Furthermore, at NCRTC, we are deeply committed to building an inclusive transport system where universal accessibility is at the core of our design philosophy. Every aspect of the RRTS - from station layout to onboard facilities - prioritises ease of use, safety, and dignity for all, with special emphasis on women's comfort, security, and gender-sensitive features. This approach reflects our vision of mobility that truly serves every citizen, leaving no one behind.

Representing this journey by way of a collection of specific content and images of key activities, challenges, and initiatives is one of the key modes of documentation undertaken by us. It will provide an attractive recall for this transformative project and be a means of easy reference for peer organisations, stakeholders, and the industry at large. It also serves as a testament to the spirit of collaboration and the enduring impact of Namo Bharat. Let it ignite the spark of innovation within you and inspire future generations to dream big and transform aspirations into achievements."

Shri Shalabh Goel
IRSEE

Managing Director,
National Capital Region Transport Corporation (NCRTC)

"The journey of bringing India's first Namo Bharat corridor to life has been both pioneering and profound; an endeavor marked by innovation, resilience, and continuous learning. This book stands as a repository of that knowledge, preserved for future generations to draw inspiration from.

The state of art Rolling Stock of Namo Bharat is different, having a design speed of 180 kmph and a maximum operational speed of 160 kmph. Its selection followed rigorous research, examining operational requirements, infrastructure interface, and compatibility. As the first regional rail system in the country, this Rolling Stock is unique, and in a pioneering step, a bundled contract was awarded to M/s Alstom erstwhile M/s Bombardier for design, manufacture and supply, along with a 15-year comprehensive annual maintenance commitment. Reflecting the Hon'ble Prime Minister's vision of Atmanirbhar Bharat, these trains are designed in Hyderabad and manufactured at Savli, Gujarat. Commuter comfort and efficiency have remained central to the design.

On the 82 km-long Delhi–Ghaziabad–Meerut corridor, about 12 km runs underground, 6 km in Delhi and 6 km in Meerut. To meet the design speed requirement of 180 kmph, NCRTC introduced, for the first time in India, the Rigid Overhead Catenary System (ROCS) suitable for 180 kmph design speed to power Namo Bharat trains in underground stretches, which offers superior stability, precision, and robustness, ensuring minimal movement during operations and rendering it nearly maintenance-free.

To witness and be a part of the seamless confluence of technology, design, and vision in this project has been a rare privilege. It reaffirms what is possible when aspiration is matched with innovation, and execution is guided by an unwavering commitment to excellence."

Shri Mahendra Kumar

Director, Electricals and Rolling Stock,
National Capital Region Transport Corporation (NCRTC)

"The commissioning of the Delhi-Ghaziabad-Meerut Namo Bharat corridor opens a new chapter in the transformational story of regional mobility in the country. It fulfils the long-standing aspirations of people for a modern, reliable, and world-class system of commute - one that will redefine how the region connects and grows. With the innovative institutional and governance model adopted, involving participation of Central Government and more than one State Government, it has the potential to be replicated in other mega-regions of the country.

Among the many firsts of this project, one significant aspect is the multiplicity of stakeholders. The implementing agency, NCRTC, is owned by the Government of India and participating State Governments of Delhi, Uttar Pradesh, Haryana and Rajasthan. However, the capital structure of the company is distinct from project financing. At the Delhi-Meerut project level, the project funds in lieu of equity were provided by the Government of India, Governments of Delhi and Uttar Pradesh (through whose territories the corridor passes), and debt financing was by multilateral banks (Asian Development Bank (ADB), New Development Bank (NDB), and Asian Infrastructure Investment Bank (AIIB)).

For a project of such magnitude, financial sustainability is as important as technical excellence. From the outset, NCRTC ensured that this vision rested on sound financial foundations. Low-cost, long-tenure multilateral funding was mobilised to provide stability, supplemented with hedging strategies attempted to mitigate currency fluctuations. Innovative contracting models for O&M of the system, and supply & maintenance of rolling stock were designed to draw in private sector efficiencies and bring in predictability of future O&M costs.

Working closely with the Government of Uttar Pradesh, the TOD policy was notified and TOD zones notified as part of the statutory city Masterplans. Further, two new Greenfield cities are now being developed within/close to the influence zone of the corridor. Such an approach would enable planned densification in proximity to transit stations and contribute towards transit accessibility and enhancing ridership of the transit network. This TOD will also enable flow of VCF revenues to flow to the State Government as well as NCRTC.

What is emerging is not only a project implemented within scheduled time and costs but a transformational urban mobility solution with the potential of changing regional commuting in the decades to come, foundation of which has been laid. To have been a part of this vision and seeing it come to life is deeply rewarding, for it proves that dedication, teamwork and focused project management can transform aspirations into enduring reality."

Ms. Namita Mehrotra

Director, Finance,
National Capital Region Transport Corporation (NCRTC)

"Lakhs of people migrate to the National Capital in pursuit of better healthcare, education, and employment opportunities. As a result, the region's infrastructure and resources are under immense pressure. In this context, a transformative initiative like Namo Bharat is not just necessary—it is a lifeline for a region struggling to breathe.

This semi-high-speed rail project now connects the heart of Delhi to the historic city of Meerut in under an hour. This enhanced connectivity will significantly improve both ease of living and ease of doing business, while also serving as a catalyst for reverse migration. The change is already visible—people are recognising the potential and are eager to be part of this transportation revolution.

The journey of implementing Namo Bharat has been deeply enriching, offering invaluable life lessons to everyone involved. Being a part of such a groundbreaking project is both an honour and a privilege—one that is set to redefine regional commuting not just in the National Capital Region, but across the entire country.

This project has pioneered several industry firsts. From the introduction of ETCS Hybrid Level 3 signalling—a global first—to the integration of local metro services in Meerut on the same infrastructure, being implemented for the first time in India, Namo Bharat has set new benchmarks. These innovations will serve as a model for similar projects in the future.

I am confident that the success of Namo Bharat will inspire the rollout of similar high-impact transportation projects across the nation."

Shri Paramjeet Singh

Director, Projects,
National Capital Region Transport Corporation (NCRTC)

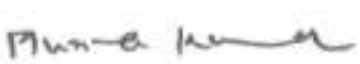
"The full commissioning of the Delhi-Ghaziabad-Meerut Namo Bharat corridor, and the launch of India's fastest 160 kmph train service on it, marks a defining moment in the country's infrastructure journey. With the foundation laid in 2019, it is truly remarkable that this pioneering and complex regional connectivity project was executed within its original six-year timeline.

The project introduced India's first slab track, engineered for 180 kmph speed, a feat that required high-precision casting and laying, alongside the highly accurate positioning of viaducts and piers. Furthermore, the corridor's route through some of Delhi, Ghaziabad, and Meerut's most densely populated areas posed significant challenges for track geometry. Overcoming numerous hurdles, including rivers, drains, and the existing metro, railway, and expressway networks, and continuing the precision engineering, the team successfully bored an underground tunnel just one meter from a metro pier foundation.

With multimodal integration as the very essence of the Namo Bharat project, the alignment and station locations were carefully adjusted to ensure seamless connections. The Sarai Kale Khan and Anand Vihar stations, for instance, are prime examples of this successful integration, offering commuters convenient links to the existing Delhi Metro, Railway station, and ISBT.

The project's timely completion, without any cost overrun despite the unprecedented disruptions of the global COVID-19 pandemic, speaks volumes about the team's resilience, efficacy, and calibre. While much of the world stood still, the team's pace never slowed. It overcame obstacles through strategic planning and innovative solutions to ensure that project execution is done with high quality and with adherence to the timeline.

To be part of this winning team which worked on such a unique and ambitious project is a matter of immense pride. This project stands not only as a testimony to what determined vision and precise execution can achieve, but also as an inspiration and blueprint for the many nation-building endeavours that will follow."



Shri Munna Kumar

Director, Works,
National Capital Region Transport Corporation (NCRTC)

NAMO BHARAT

INDIA'S FIRST
REGIONAL RAPID TRANSIT SYSTEM

With the dawn of a new era, a New India embraces a transformative leap in urban mobility. This pioneering Regional Rapid Transit System (RRTS) is more than just a train; it is a meticulously planned solution to decongest our bustling cities and connect communities like never before. Discover the vision, understand the crucial need, and explore the foundational decisions that brought India's first RRTS to life, setting a new benchmark for swift, comfortable, and sustainable travel. Get ready to embark on a journey into the future of connectivity.

Namo Bharat:
Transforming NCR's Landscape

In a world driven by connection and opportunity, the rhythm of a region's life depends on how freely its people can move. Yet, for India's vibrant National Capital Region, a unique challenge had emerged, quietly growing with each passing year. The region found itself caught in an ever-tightening embrace of too many vehicles and too little space.

This spiralling growth painted a pressing picture: crowded streets, a sky often veiled by a pall of smoke, and the sheer pace of life becoming a burden rather than a joy. Despite tireless efforts to expand our road infrastructure, the relentless pulse of growth meant that relief was just out of reach. To truly unlock the region's immense potential, to restore harmony to its bustling life, a bold, new vision for seamless movement was not just a desire, but an urgent call.

SHUTTERSTOCK IMAGES OF DELHI

BARAPULLAH CROSSING

Namo Bharat is a bold new vision in India's regional connectivity. Connecting NCR's farthest corners at never seen before speed, comfort and convenience.

What is Namo Bharat?

Answering that urgent call for transformation, a powerful new idea took shape: Namo Bharat. It represents a promise of tomorrow, delivered today, a pioneering spirit embodied in India's first-ever Regional Rapid Transit System. This is not merely about faster transport; it is about redefining countless lives and giving wings to their dreams, it is about weaving together the fabric of our vast National Capital Region in a myriad of opportunities and fostering growth of our communities with balance and harmony.

A dedicated pathway, where journeys are not just swift, but genuinely comfortable, connecting distant towns and bustling cities with effortless grace. This experience carries you smoothly from point to point over significant distances. Distinct from local metros, crafted for those longer voyages, allowing reclamation of precious time and rediscovering the joy of travel across the entire region.

Namo Bharat is a new, dedicated, high speed, high capacity, comfortable commuter service connecting NCR in an unprecedented manner.

Our Vision

Improve quality of life of people by providing equitable, fast, reliable, safe, comfortable, efficient & sustainable mobility solution enabling economic development of NCR

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NAMO BHARAT CORRIDORS PHASE 1

DELHI – GHAZIABAD – MEERUT: 82 KM
DELHI – GURUGRAM – SNB – ALWAR: 198 KM
DELHI – PANIPAT – KARNAL: 136 KM

SARAI KALE KHAN SITE

Dreams Turn Into Reality

With the vision for Namo Bharat clear, the formidable next step was bringing this grand dream to life. This required a robust financial blueprint to match the project's ambition. A powerful symphony of support emerged, blending significant backing from international partners like the Asian Development Bank (ADB), Asian Infrastructure Investment Bank (AIIB), and New Development Bank (NDB) with a 50:50 equity split from the Government of India and its NCR states.

NCRTC EQUITY STRUCTURE

- GOVERNMENT OF INDIA
  50%
- GOVERNMENT OF HARYANA
  12.5%
- GOVERNMENT OF NCT OF DELHI
  12.5%
- GOVERNMENT OF UTTAR PRADESH
  12.5%
- GOVERNMENT OF RAJASTHAN
  12.5%

FUNDS FOR THE DELHI-MEERUT NAMO BHARAT

- GOVERNMENT OF INDIA
  20% OF PROJECT
- GOVERNMENT OF NCT OF DELHI
  3.22% OF PROJECT
- GOVERNMENT OF UTTAR PRADESH
  16.78% OF PROJECT
- ASIAN DEVELOPMENT BANK
  1 Billion USD
- NATIONAL DEVELOPMENT BANK
  500 Million USD
- ASIAN INFRASTRUCTURE INVESTMENT BANK
  500 Million USD

This strategic funding model ensured low-cost, long-term capital, with untied loans providing complete flexibility in technology selection, a crucial factor for this pioneering project. NCRTC's innovative approach included two Yen-denominated tranches, diversifying its currency portfolio. As well as, supporting the "Make in India" initiative by including the rolling stock procurement under NDB financing.

Conscious of its human footprint, the project also meticulously worked with local communities, ensuring fair compensation for land acquisition and making this a true partnership between aspiration and infrastructure.

SARAI KALE KHAN STATION

DELHI-MEERUT NAMO BHARAT CORRIDOR IN NUMBERS

ROUTE LENGTH
82.15 KM

TOTAL NUMBER OF NAMO BHARAT STATIONS
16

MEERUT METRO STATIONS
13 (INCLUDING 4 COMMON FOR NAMO BHARAT AND MEERUT METRO)

TUNNEL DIAMETER
6.5 M

UNDERGROUND LENGTH
12 KM

TOTAL NUMBER OF UNDERGROUND STATIONS
4

ELEVATED LENGTH
70 KM

TOTAL NUMBER OF ELEVATED STATIONS
19

TOTAL NUMBER OF PIERS
2,958

TALLEST VIADUCT
26 M

TOTAL NUMBER OF WELL FOUNDATION
32

TRACK GAUGE - STANDARD GAUGE
1,435 MM

LONGEST STEEL SPAN
150 M

PRECAST SLABS FOR TRACKS
44,000

YAMUNA BRIDGE
626 M

1956 >> Interim General Plan for a planned decentralisation to outer areas and outside the Delhi region

1962 >> Master Plan emphasised planning in regional context

1985 >> Enactment of National Capital Region Planning Board Act

1998 >> Indian Railways study mooted idea of RRTS for NCR

2006 >> Planning Commission Task Force formed, under the Chairmanship of Secretary, Ministry of Urban Development, to develop a Multimodal transit system for NCR

2009 >> Functional Plan on transport for NCR 2032, identified 8 RRTS corridors

>> 3 Namo Bharat priority corridors of Phase 1
- i. Delhi – Ghaziabad – Meerut
- ii. Delhi – Gurugram – SNB – Alwar
- iii. Delhi – Panipat – Karnal

2011 >> MoU signed amongst, MoUD, NCRPB and State Governments of NCT of Delhi, Haryana, Rajasthan and Uttar Pradesh for formation of NCRTC

2013 >> Incorporation of NCRTC under Companies Act, 1956

2017 >> Government of Uttar Pradesh approved the Detailed Project Report of Delhi-Meerut corridor

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MAKE IN INDIA

I M P O R T A N T

MILESTONES

2019

>> In March, Hon'ble Prime Minister laid the foundation stone for Delhi-Meerut corridor
>> In June, NCRTC started construction
>> Government of Haryana & Rajasthan approved the DPR of Delhi-Gurugram-SNB RRTS Corridor

2020

>> Loan agreement for USD 500 million signed between Government of India and Asian Development Bank for funding Delhi-Meerut corridor

2021

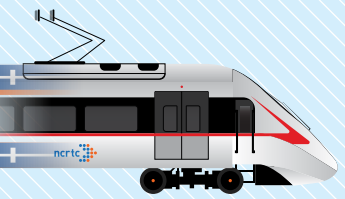
>> Namo Bharat trainset manufacturing begins at Savli, Gujarat
>> Government of Haryana approved the DPR of Delhi-Panipat RRTS corridor

2022

>> Slab track factory setup in Meerut by NCRTC
>> First Namo Bharat trainset reaches Duhai Depot
>> Successful testing of ETCS Level-3 Hybrid signalling over LTE network

2023

>> Hon'ble Prime Minister Shri Narendra Modi inaugurated the priority section of the first RRTS corridor between Sahibabad and Duhai Depot



2025

>> Namo Bharat's first corridor, Delhi-Meerut is ready for commissioning

HARYANA

MODI NAGAR SOUTH

DUHAI DEPOT

MURAD NAGAR

DUHAI

GULDHAR

GHAZIABAD

DELHI

ANAND VIHAR

SAHIBABAD

SARAI KALE KHAN

NEW
ASHOK
NAGAR

JANGPURA

MODIPURAM DEPOT

MODIPURAM

BEGUMPUL

SHATABDI NAGAR

MEERUT SOUTH

MODI NAGAR NORTH

MEERUT

U T T A R P R A D E S H

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DELHI MEERUT CORRIDOR

16 NAMO BHARAT STATIONS + 13 MEERUT METRO (INCLUDING 4 COMMON STATIONS)

2019 - 2025 | LENGTH 82 KM

UNDERGROUND

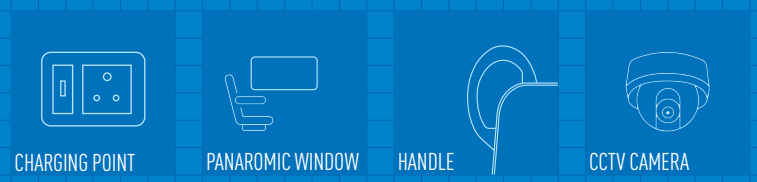
ELEVATED

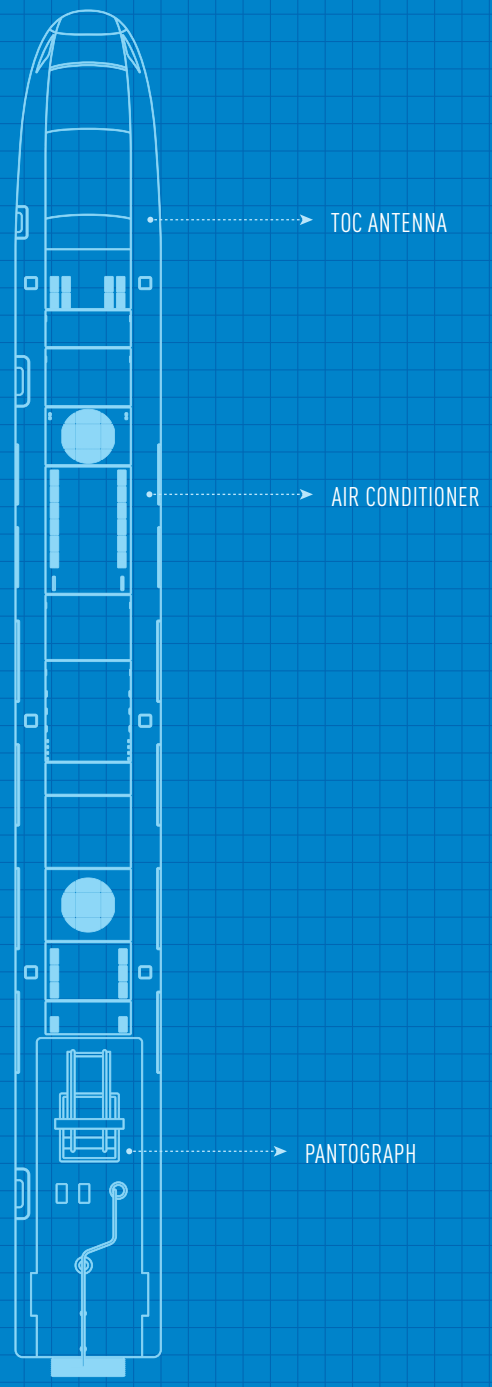
NAMO BHARAT STATIONS

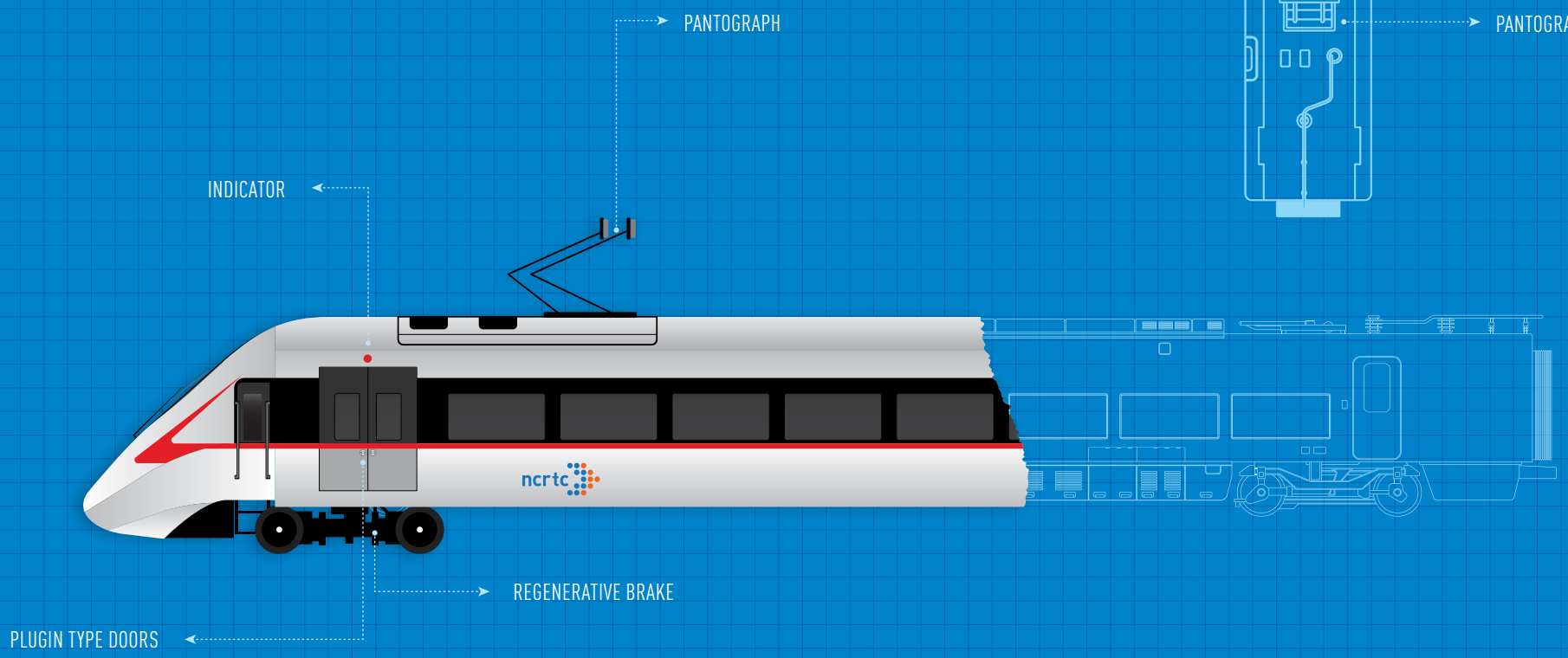
MEERUT METRO STATIONS

नमो भारत

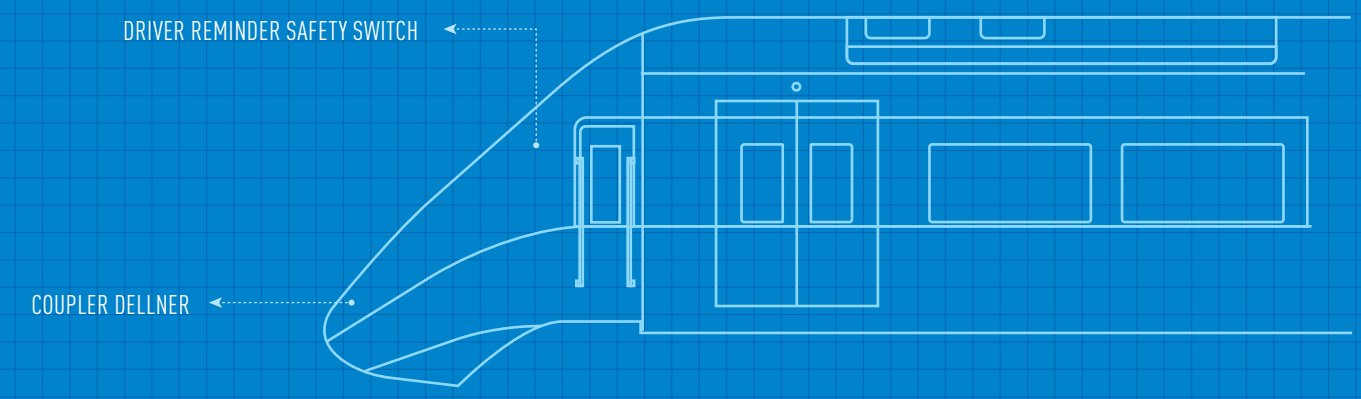
Transit service by ncrtc

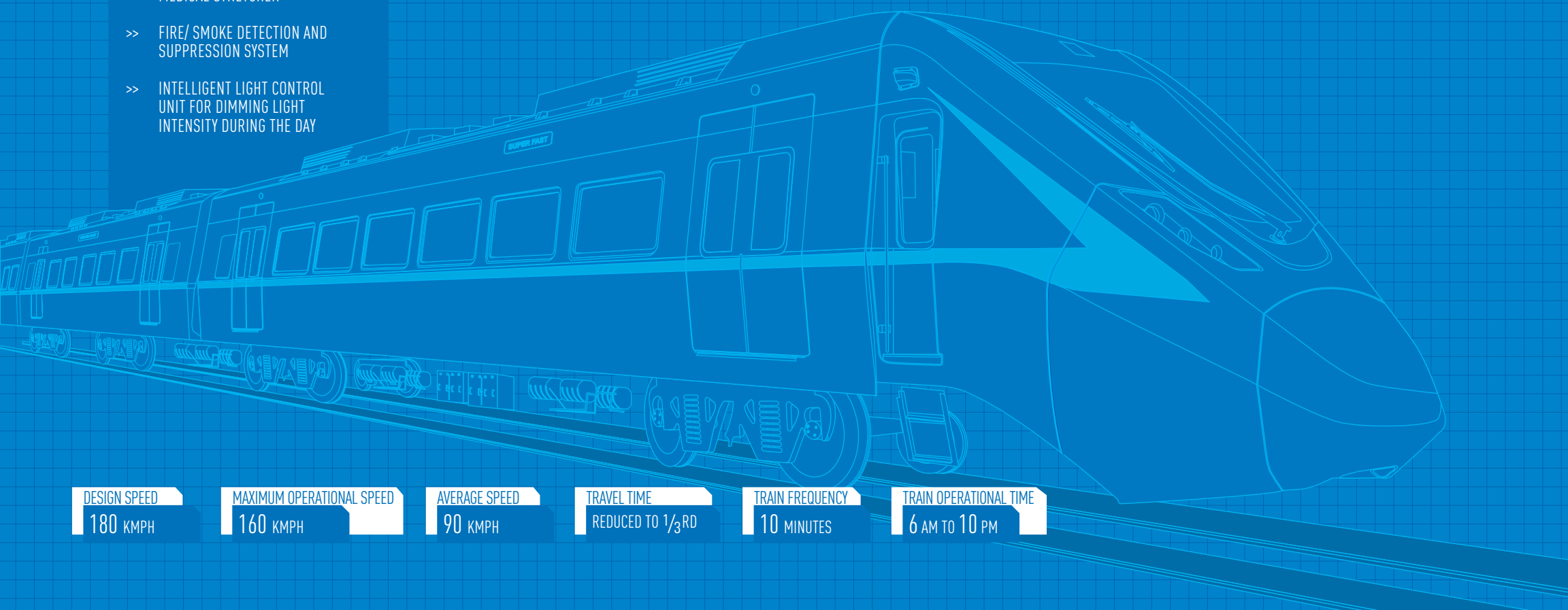






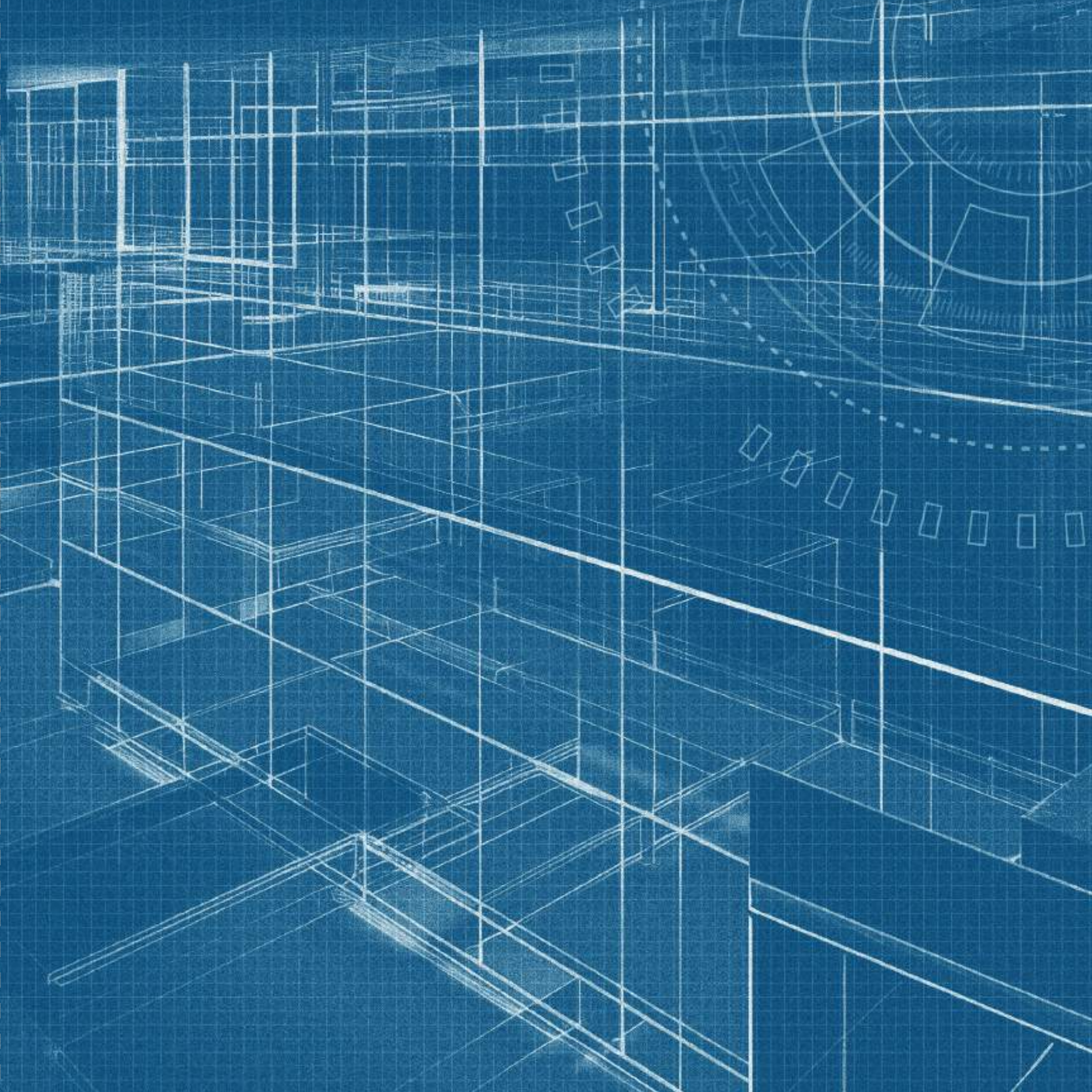
- >> OVERHEAD LUGGAGE RACK
- >> AMPLE STANDING SPACE
- >> DIGITAL DYNAMIC ROUTE MAP
- >> COMFORTABLE 2X2 TRANSVERSE SEATING
- >> MOBILE/ LAPTOP CHARGING PORT
- >> SELECTIVE DOOR OPENING WITH PUSH-BUTTON FOR ENERGY CONSERVATION
- >> AIR-CONDITIONED COACHES
- >> DOOR INDICATION LAMP
- >> PUBLIC ANNOUNCEMENT AND DISPLAY SYSTEM
- >> DRAUGHT SCREEN
- >> GRAB HANDLES FOR AISLE PASSENGERS
- >> SPACE FOR WHEELCHAIR AND MEDICAL STRETCHER
- >> FIRE/ SMOKE DETECTION AND SUPPRESSION SYSTEM
- >> INTELLIGENT LIGHT CONTROL UNIT FOR DIMMING LIGHT INTENSITY DURING THE DAY





DESIGN SPEED	MAXIMUM OPERATIONAL SPEED	AVERAGE SPEED	TRAVEL TIME	TRAIN FREQUENCY	TRAIN OPERATIONAL TIME
180 KMPH	160 KMPH	90 KMPH	REDUCED TO 1/3RD	10 MINUTES	6 AM TO 10 PM

2



CREATING THE BLUEPRINT

With the vision firmly cast and the essential resources gathered, the monumental task of bringing Namo Bharat to life began. This was not merely about building; it was about designing a future, piece by intricate piece. From crafting seamless connections to overcoming urban complexities, these foundational choices laid the intelligent groundwork, ensuring every aspect of this pioneering system was meticulously envisioned.

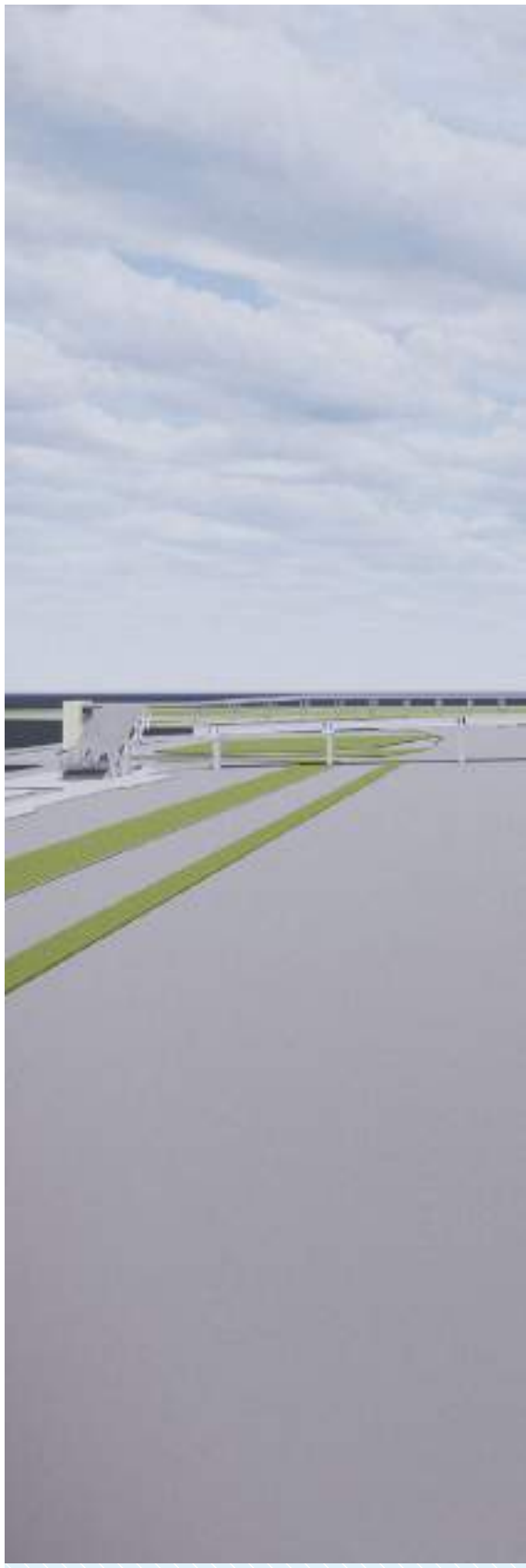
Sarai Kale Khan: The Unifier

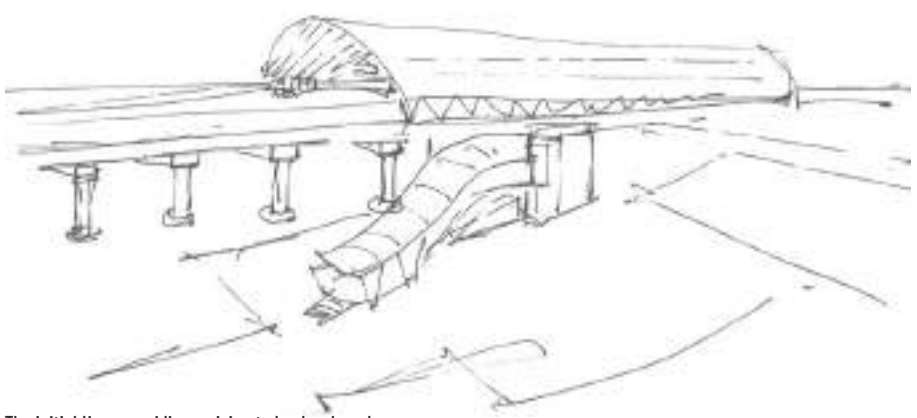
Among the project's early, crucial choices, a decision to reimagine the network's heart stands out. What was initially conceived as separate starting points for each corridor was unified into a single, magnificent hub.

EXTERIOR DESIGN OF THE SARAI KALE KHAN STATION

This visionary revision was a profound commitment to the passenger, ensuring effortless transitions and truly integrated travel.

Interoperability is the cornerstone of the Namo Bharat project. By standardising platform heights, rolling stock, and signalling systems from the outset, trains can now run seamlessly across all three corridors without passengers needing to interchange. This foresight not only enhances convenience but also maximises asset utilisation and sets a national template for regional rail systems. What began as a simple underground station concept was transformed into an elegant, elevated gateway, ensuring every journey begins with a sense of seamless unity.





The initial lines providing a vision to be developed

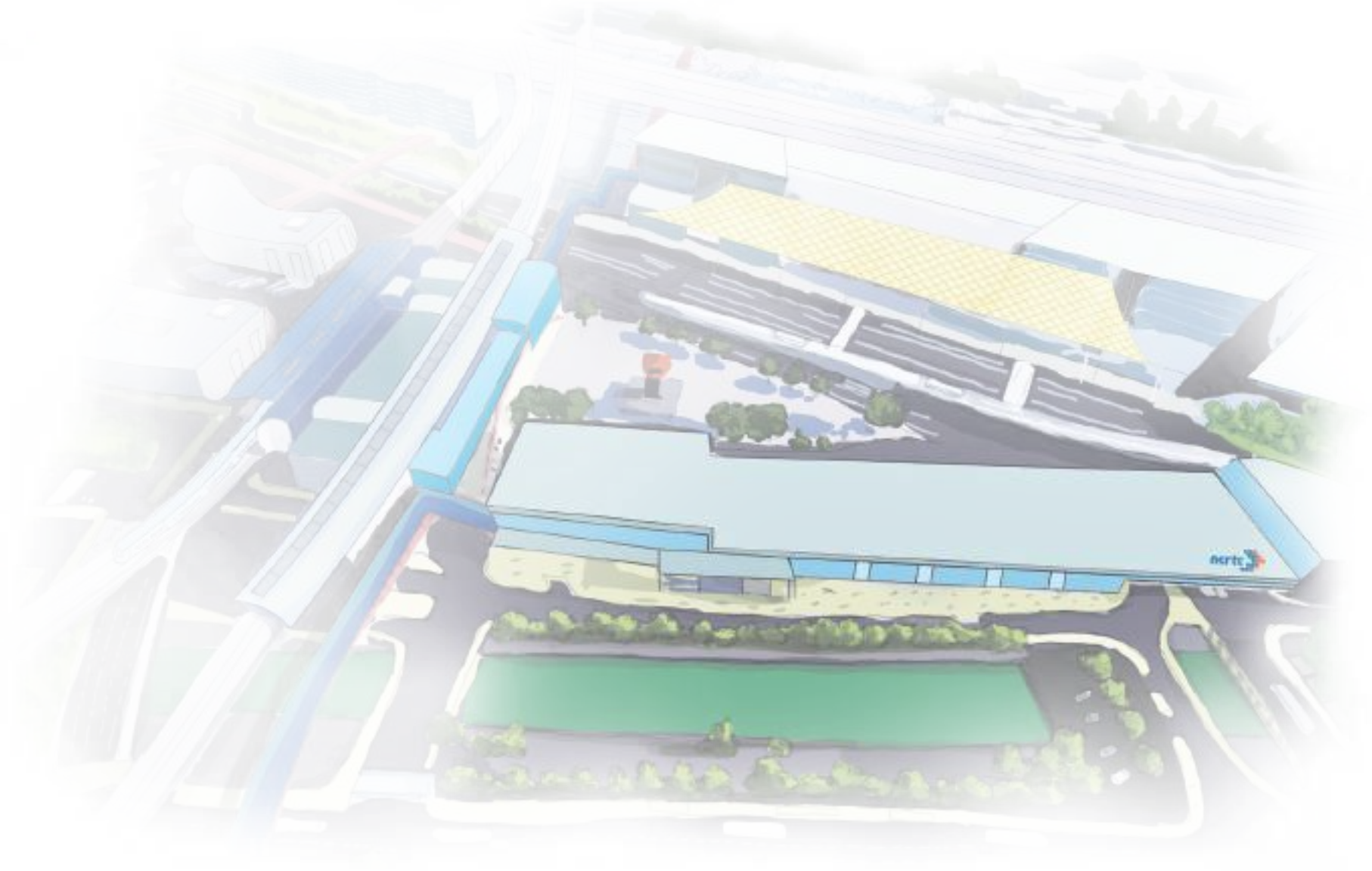
EXTERIOR DESIGN OF THE SARAI KALE KHAN STATION

BEFORE	AFTER
3 Separate Terminus Stations	1 Single Connected Station
No interoperability between corridors	Interoperability between the Phase 1 corridors
Underground	Elevated
O&M for 3 stations	O&M for 1 station only

Anand Vihar: A True Testament of Multimodal Integration

From the strategic decision of a unifying hub, our blueprint turned to the intricate jigsaw of connecting existing lifelines. Among the many urban puzzles, the site of Anand Vihar presented a formidable challenge. This area, already a bustling crossroads where railways, bus terminals, and city metro lines converged, demanded a solution that embraced a seamless future.

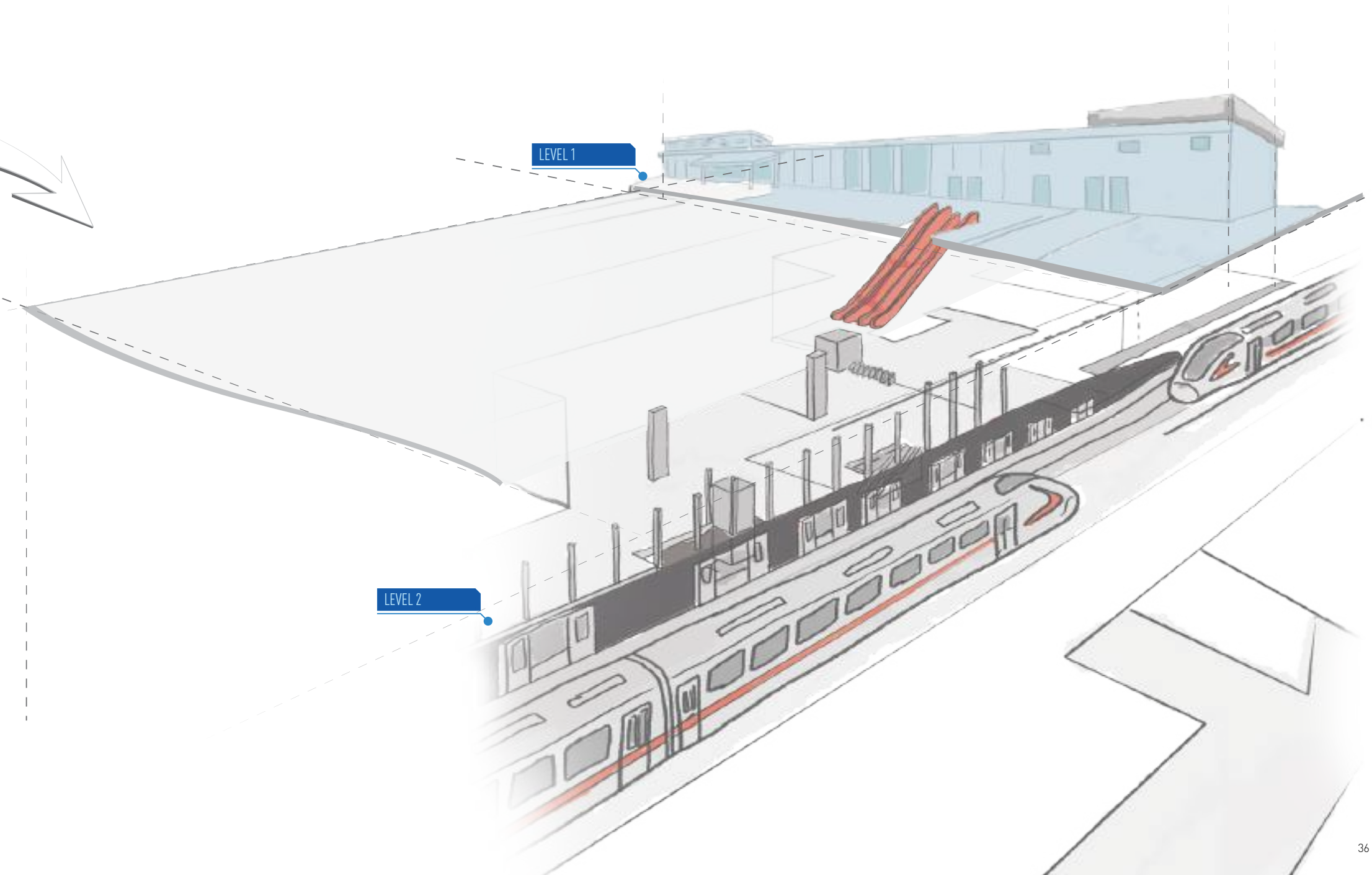
EXTERIOR VIEW OF THE ANAND VIHAR STATION



The initial lines providing a vision to be developed

A path deep beneath the surface was carved, navigating through an existing maze of foundations and intricate underground structures. It was like threading a needle through a bustling cityscape, with every inch requiring unparalleled precision and foresight. Instead of discouraging obstacles, the team envisioned opportunity. The solution was allowing travellers to effortlessly move from one mode of transport to another without ever stepping onto the busy streets. This thoughtful integration, born from overcoming complex underground challenges, ensures that Anand Vihar becomes more than a stop—it becomes a gateway, designed for ultimate traveller ease and connection.

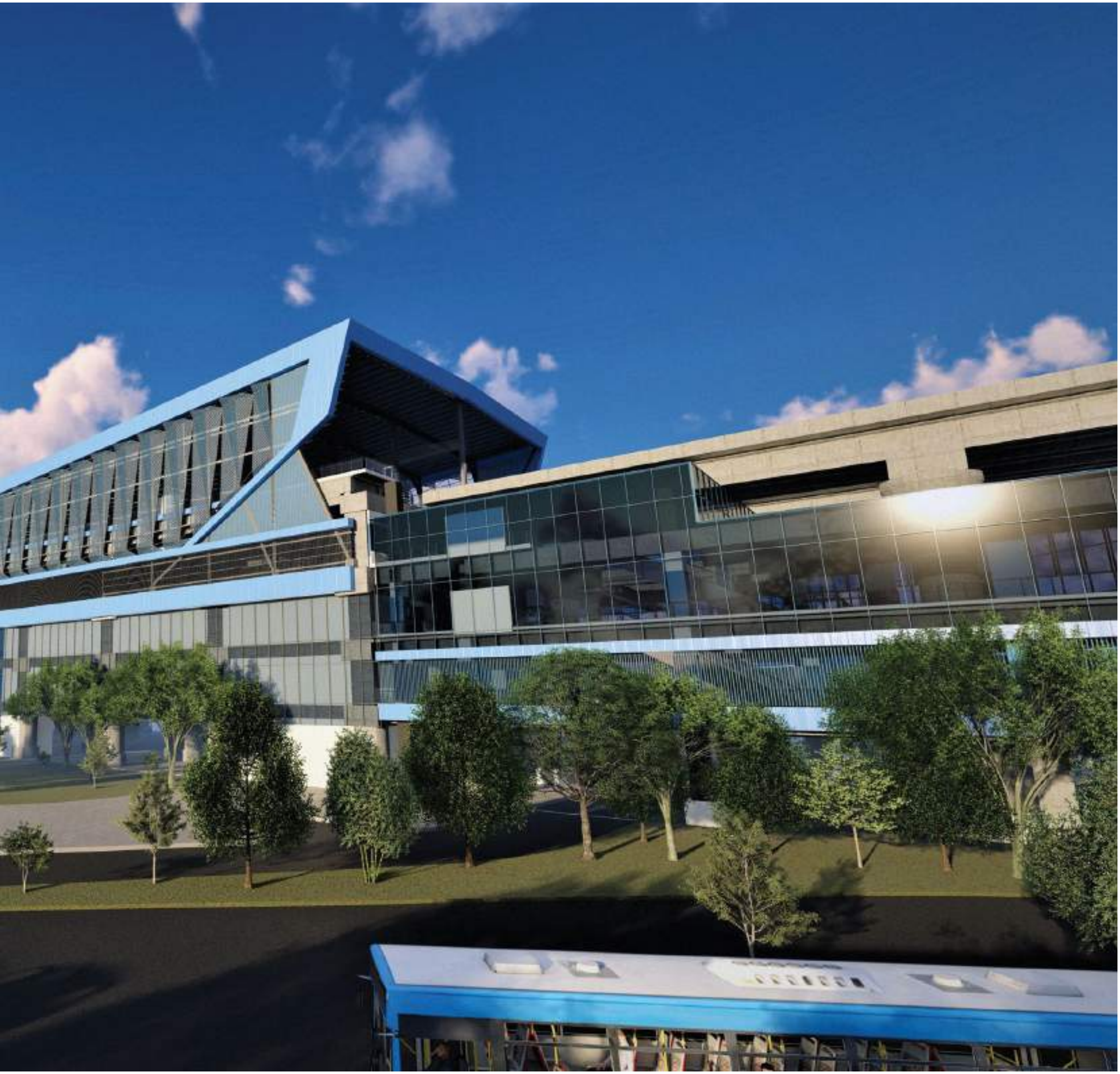
INTEGRATED WITH
RAILWAY STATION, ISBT, TWO METRO CORRIDORS AND UPSRTC BUS STAND



INTERIOR VIEW OF THE ANAND VIHAR STATION

Ghaziabad:
Soaring Heights of Connectivity

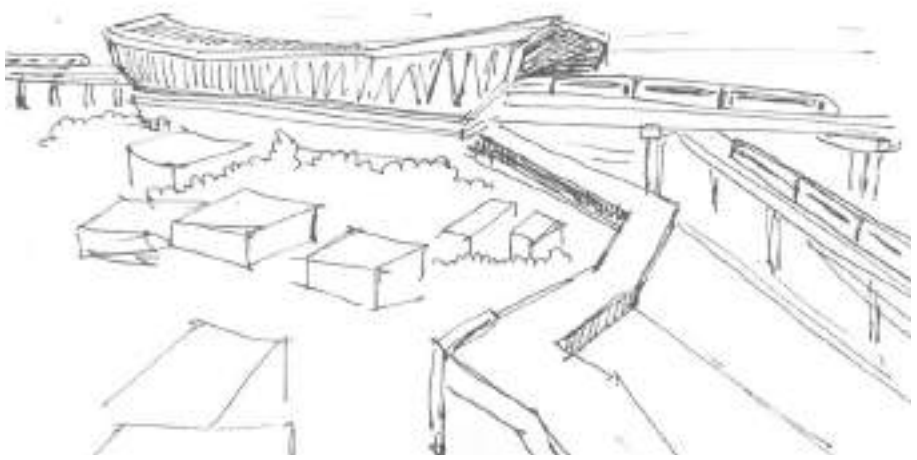
As the vision unfolded, another significant landmark emerged, reaching towards the sky in a testament to engineering ambition and thoughtful urban planning.



EXTERIOR DESIGN OF THE GHAZIABAD STATION

The Ghaziabad station, a truly elevated marvel at a height of 26 metres, it redefines what a transit hub can be. Soaring gracefully above its surroundings, it stands as a symbol of connectivity, meticulously woven into the city's pulse. Designed to seamlessly embrace current metro lines and bus routes, it ensures effortless transition for every traveller.

Furthermore, the surrounding area is thoughtfully re-imagined for smooth traffic flow, with dedicated zones to ensure congestion-free movement. Just before the station, a remarkable, long steel span, an engineering feat in itself, gracefully bridges existing city infrastructure, showcasing the innovative spirit that defines every aspect of Namo Bharat.



The initial lines providing a vision to be developed

EXTERIOR DESIGN OF THE GHAZIABAD STATION

Integrating Meerut Metro with Namo Bharat

Another groundbreaking decision from the blueprinting phase was one that truly embodied the spirit of thoughtful planning. As the grand vision of Namo Bharat unfolded, it became clear that a local transit network was also being considered for Meerut, with some routes closely mirroring the regional corridor. The idea of building separate, parallel systems, each requiring immense resources, seemed less than ideal, risking duplication in serving the same communities.

EXTERIOR DESIGN OF THE MEERUT SOUTH STATION

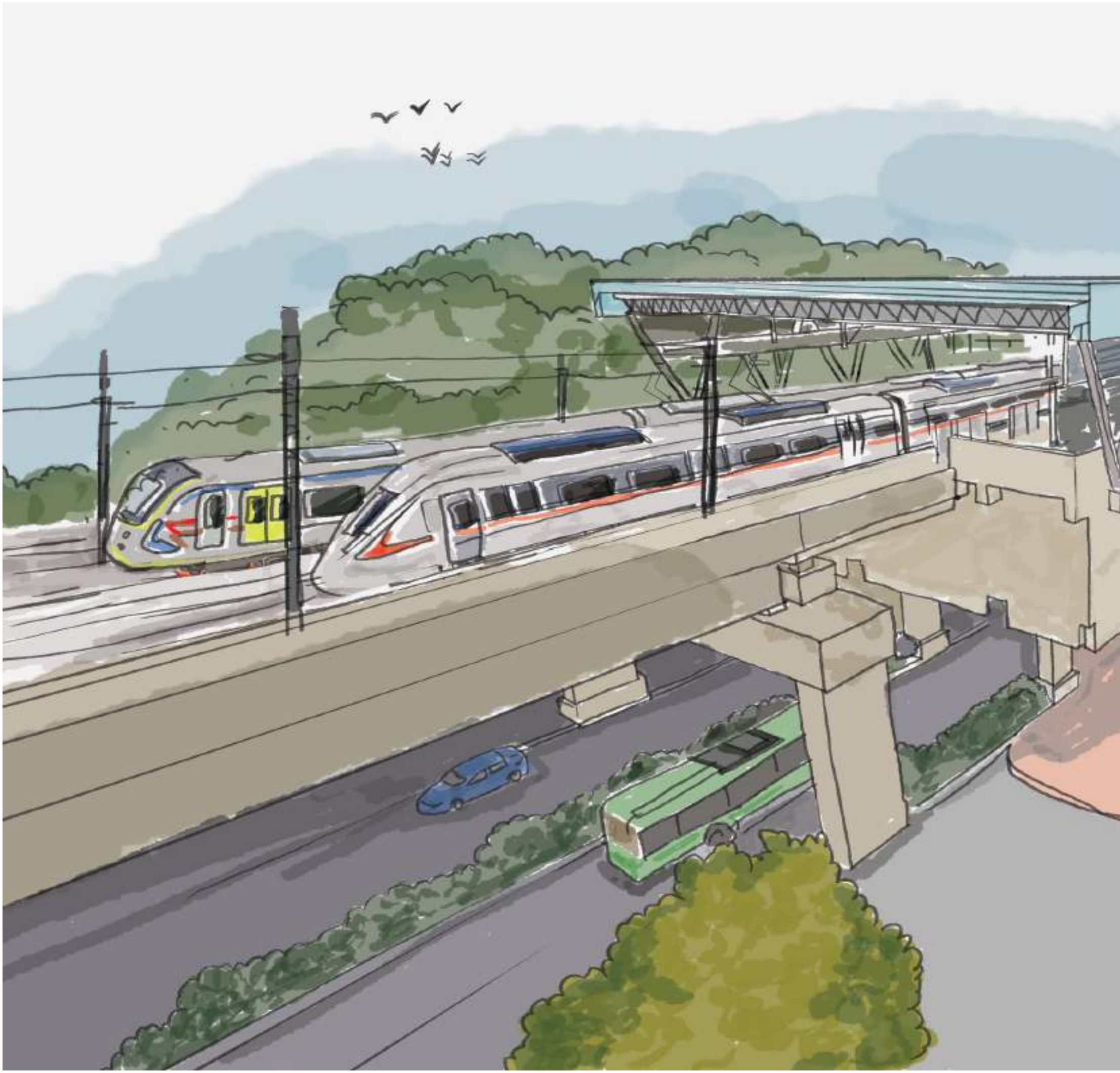
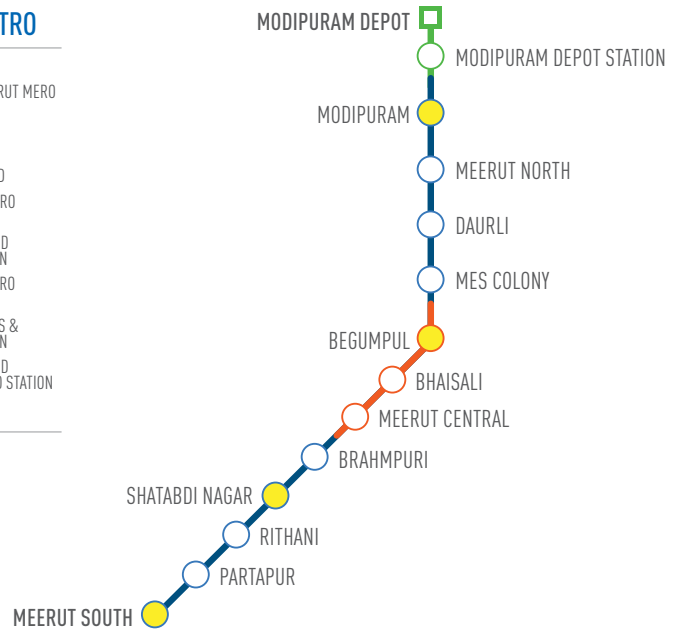


ILLUSTRATION OF THE MEERUT METRO AND NAMO BHARAT STATION

MEERUT METRO

ALIGNMENT OF MEERUT MERO

- ELEVATED
- AT GRADE
- UNDERGROUND
- ELEVATED METRO STATION
- UNDER GROUND METRO STATION
- AT GRADE METRO STATION
- ELEVATED RRTS & METRO STATION
- UNDER GROUND RRTS & METRO STATION
- DEPOT



STATIONS FOR MEERUT METRO:
13

DESIGN SPEED OF:
135 KMPH

TOTAL NUMBER OF PASSENGERS TRAVELING IN THE THREE-COACH METRO:
700

TOTAL STRETCH BETWEEN MEERUT SOUTH AND MODIPURAM DEPOT:
23 KM

ESTIMATED SAVINGS IN CAPITAL EXPENDITURE, AMOUNTING TO
INR 6,350 CRORES (720 MILLION USD)

A TOTAL OF 4 STATIONS SERVE BOTH NAMO BHARAT AND MEERUT METRO:
MEERUT SOUTH, SHATABDI NAGAR, BEGUMPUL, AND MODIPURAM

This presented a unique opportunity for innovation. After careful deliberation and collaborative exploration, a transformative solution emerged: instead of two distinct networks running side-by-side, why not weave them into a single, cohesive infrastructure?

This powerful integration means that local journeys within Meerut, and the faster regional travels, can share the same meticulously crafted pathways. It is a testament to efficient design, enhancing the ease of travel by allowing seamless transitions between local and regional connections, ultimately offering a more intuitive and integrated experience for everyone.

The initial lines providing a vision to be developed

Begumpul Station

After weaving a network of seamless connections at major urban hubs, the blueprint for Namo Bharat turns its attention to a different kind of challenge: bringing the same fluid experience to the heart of an ancient, bustling city. The vision was to create a modern oasis of movement without disrupting the vibrant, living tapestry of the existing marketplace.

स्टेशन प्रवेश
Station Entrance
बेगमपुल
Begumpul

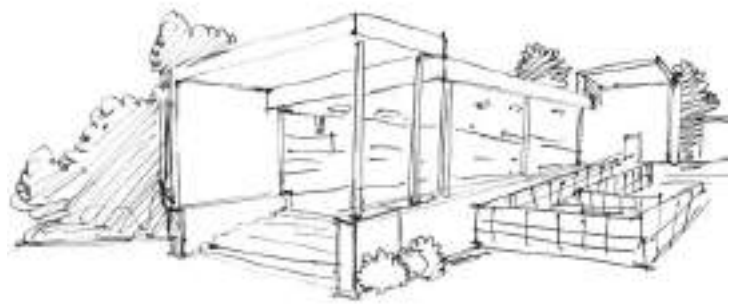
STATION LENGTH
246 M

STATION WIDTH
24.5 M

STATION DEPTH
22 M

4-LEVELS STATION
GROUND, MEZZANINE, CONCOURSE, AND PLATFORM LEVELS

This aspiration found its form in the Begumpul Station, an underground marvel carefully sculpted beneath the city's lively rhythm. Far below the daily hustle and bustle, a spacious and multi-layered gateway has been crafted. It is designed to be a hub of effortless flow, with multiple entry and exit points thoughtfully placed to serve the surrounding areas. Inside, a host of escalators and elevators stand ready to carry passengers between its various levels, ensuring that this new transit landmark, which will serve both regional and local needs, remains a symbol of accessibility and quiet progress. Integrated into the very soul of Meerut that it serves.



The initial lines providing a vision to be developed

Relocating Major Utilities

The blueprinting journey confronted an invisible labyrinth: the intricate web of existing utilities that lay beneath and above our cities. Building a transformative system like Namo Bharat through bustling urban areas meant navigating a world of lifelines – the pipes carrying water and gas, the cables transmitting power and communication. Historically, moving these essential services has often caused delays, inconveniencing communities and slowing vital projects.

THE
MORE
YOU LEARN,
THE
MORE

High-Tension and
Low-Tension Power Lines

Gas Pipelines

Oil Pipelines

Water/ Sewer Lines,
Drains and Canals

Telecommunication Lines

Road Widening

Recognising this challenge, the team adopted a remarkably proactive approach. Long before the main construction teams arrived, a meticulous plan was set in motion to guide these pathways to new locations. This foresight meant that when the moment came for heavy machinery to break ground, the critical groundwork was already complete. It was a testament to thoughtful planning, anticipating challenges to ensure continuous progress and minimise disruption. This commitment saved precious time for Namo Bharat and its countless commuters.

NCRTC adopted the *hotline technique* to ensure uninterrupted power supply while shifting and modifying the electrical transmission lines infringing the Delhi–Meerut corridor near Sarai Kale Khan. This advanced method allowed the work to be executed safely without shutting down the live 220 kV double circuit transmission line crossing below, which could not be de-energized as it serves as a radial feeder supplying critical power.

GHAZIABAD STATION

Micro-tunnelling

After seeing the grand scale of the shifting of major utilities, our journey into ingenuity now turns to a more subtle, yet equally remarkable art: navigating the unseen complexities beneath our urban fabric. At bustling hubs like Anand Vihar, the challenge is not just building new pathways, but gracefully working around the vital arteries already pulsing beneath the ground.

The need to reroute essential hidden channels without disturbing the flow of life above or disrupting the cherished green spaces that dot the landscape. This called for a specialised technique, a 'micro-tunnelling' approach. It is like performing intricate surgery underground, carefully guiding new conduits through tight spaces without the need for disruptive open excavations. This subtle method ensured that essential services remained uninterrupted, traffic continued to flow freely, and the natural environment remained untouched, allowing Namo Bharat to integrate into the vibrant, living tapestry of our cities.

BELOW THE SURFACE
6 METRES

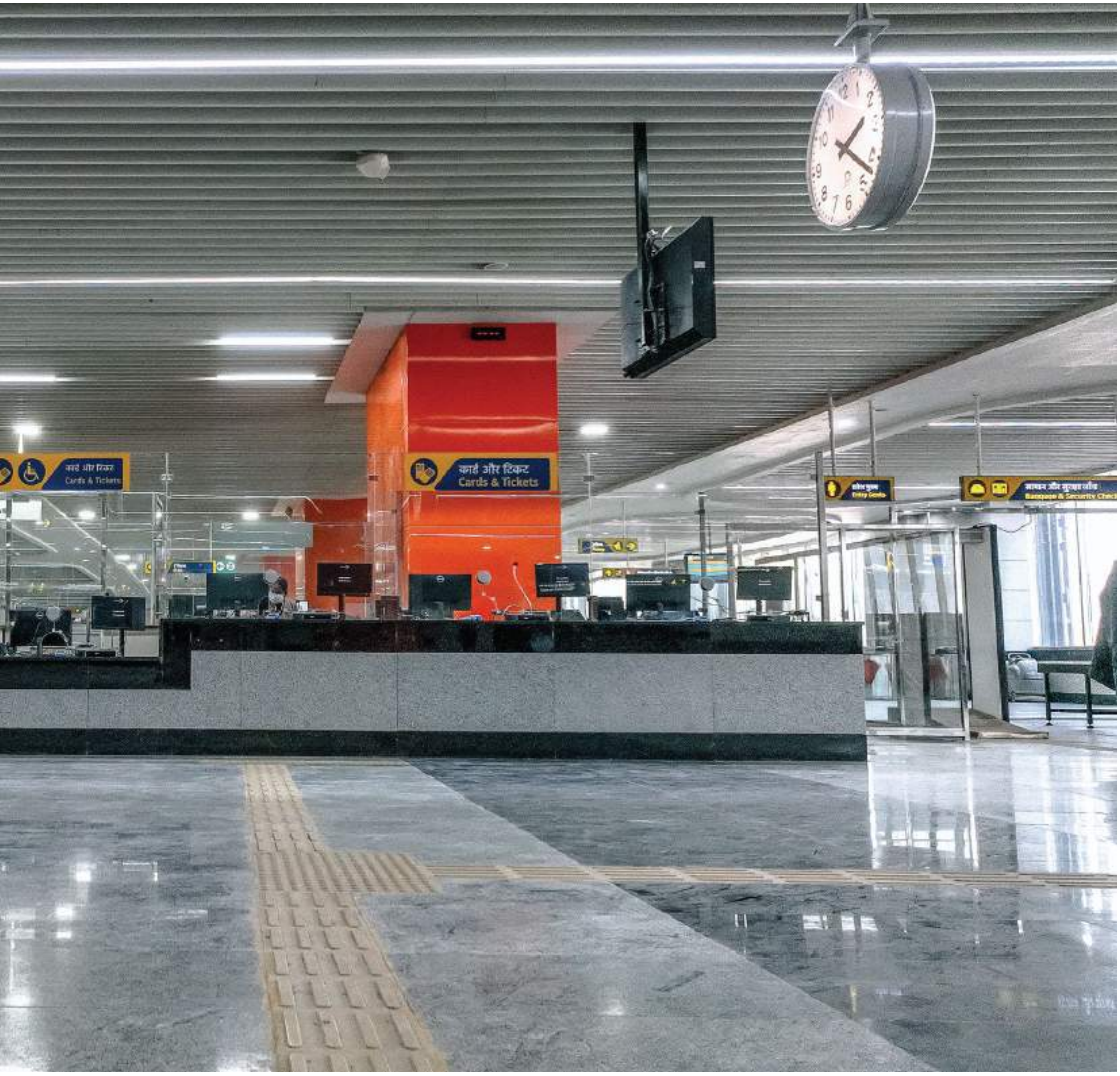
SEWAGE PIPES
600 METRES LONG,
900 MM DIAMETER

EXISTING TREES OVER SEWAGE LINE SAFEGUARDED

TRAFFIC FLOW REMAINED UNOBSTRUCTED WHILE TUNNELLING

Ensuring Perpetual Motion

To lay the groundwork for an enduring legacy, NCRTC adopted a pioneering procurement strategy. For elevated sections, a flexible, bill of quantities (BOQ) model was used, adapting to dynamic project needs. Simultaneously, complex underground packages were awarded on a design-and-build basis, with a structured, milestone-driven approach.



ANAND VIHAR STATION

This blend of strategies established new benchmarks for large-scale rail procurement, ensuring a balance of quality, cost, and speed.

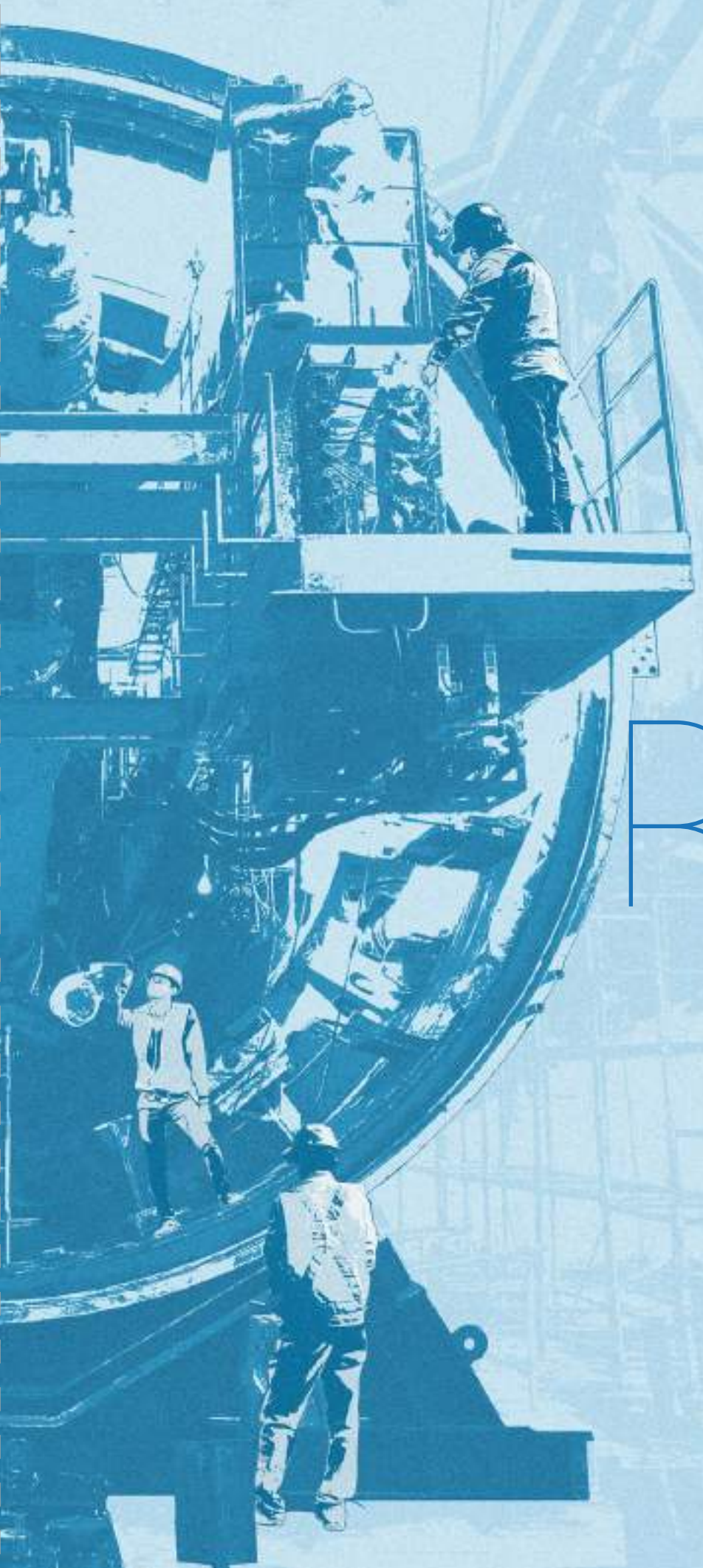
Building the infrastructure was one achievement; ensuring its vibrant life for generations was another. In a visionary step, a pioneering approach was chosen for the ongoing care and operation of Namo Bharat. A long-term partnership was forged with global experts. This collaboration goes far beyond simple maintenance; from orchestrating train movements and managing bustling stations, to meticulously caring for the tracks, signals, and power lines that guide every journey. This agreement is built on trust and shared ambition, with performance linked directly to passenger experience, punctuality, and comfort. It is designed to bring international best practices home, nurture local talent, and guarantee that Namo Bharat remains a symbol of reliable, world-class travel for years to come.

DUHAI DEPOT

KEY BENEFITS OF 12 YEAR AGREEMENT WITH **M/S DB RRTS OPERATIONS INDIA PVT. LTD.**

- PREDICTABILITY OF LONG-TERM COSTS AND MANAGERIAL EFFICIENCIES
- TRANSFER OF KNOWLEDGE OF INTERNATIONAL BEST PRACTICES
- ENHANCEMENT OF EXISTING SKILLSETS OF LOCAL MANPOWER
- OPTIMISING PERFORMANCE THROUGH INCENTIVES AND PENALTIES

DESIGNING INFRAST



NEW-AGE RUCTURE

With every critical decision thoughtfully made, the journey entered its next thrilling phase: transforming vision into physical reality. A reality of the innovative spirit that shaped Namo Bharat's foundation, exploring cutting-edge engineering and groundbreaking design principles. In this chapter, we uncover how modern construction techniques and ingenious solutions brought forth a new era of infrastructure, built to endure and elevate the travel experience for generations to come.

Aligning the Path

The very first stroke on the design canvas was charting the most intelligent course for Namo Bharat. This was not merely about drawing a line; it was about understanding the pulse of the region and crafting a path that served its people.

This led to a dual approach of rigorous optimisation. Firstly, the pathway was carefully woven along existing arteries – the major highways – ensuring it reached the heart of communities without demanding vast new swathes of land. Secondly, a meticulous re-evaluation of the entire route embraced elevated structures wherever possible. Constructing above ground, when technically sound, promised not only greater efficiency but also reduced complexities and a faster realisation of the dream.

SAHIBABAD SITE

IMPROVED CONSTRUCTABILITY AND REDUCED RISK OF COST AND TIME OVERRUN

O&M COST FOR THE ELEVATED SECTION IS SUBSTANTIALLY LOWER THAN THE UNDERGROUND SECTION

CAPITAL COSTS SAVED BY ALIGNMENT OPTIMISATION:
INR 2,600 CRORES
(294 MILLION USD) AND OVER

Bridging the Mighty Yamuna

While designing new-age infrastructure, the challenge of crossing a natural lifeline that has defined the region for millennia was overcome.

The Yamuna Bridge is more than a mere physical link, this monumental structure is a bridge to a new era of connectivity. Its construction was a delicate dance with the earth itself, as teams worked to overcome unseen obstacles and unpredictable ground beneath the river's surface.

YAMUNA BRIDGE SITE

CROSSING OF YAMUNA RIVER FROM UNDERGROUND TO ELEVATED REDUCED RISKS, COSTS AND CHALLENGES

TOTAL LENGTH OF BRIDGE
1.35 KM

The Backbone of Namo Bharat

With the pathway strategically defined, the next challenge lay in designing the very framework that would carry these swift journeys high above the ground. How would these elevated sections be robust enough to cradle speed with unwavering grace?

This question led to a deep exploration of ideal structural forms. Various designs were meticulously studied, each promising efficiency.

CASTING YARD SAHIBABAD

SAHIBABAD STATION

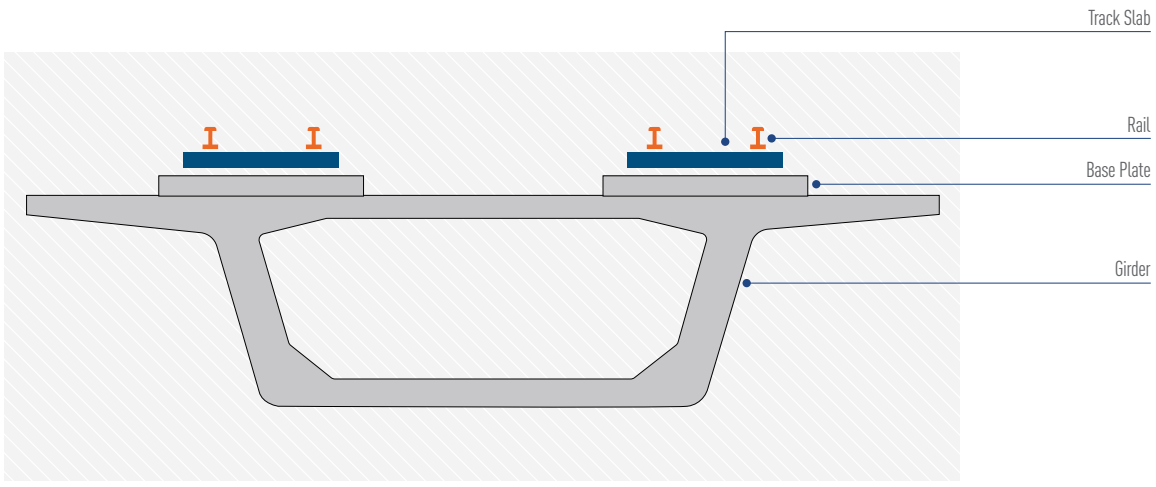
BOX GIRDER ADVANTAGES:

- EASE IN LAUNCHING
- REDUCED PIER CAP WIDTH
- LESSER DEFLECTION ALLOWING HIGH-SPEED OPERATION
- HIGHER TORSIONAL RESISTANCE

BOX GIRDER USED IN APPROX 64 KM OF ELEVATED CORRIDOR

After careful deliberation, a superior choice became clear: a design known for its exceptional strength and inherent stability. This robust form promised minimal sway, superb handling of dynamic forces, and a smoother passenger experience. Its nature also allowed for easier construction and ample space for future care.

The PSC Box Girder type of super structure, became the true backbone for the elevated journey.



Installing the Backbone

With the box girders of Namo Bharat's backbone cast, the next marvel lay in orchestrating their ascent. How would these colossal pieces be lifted and perfectly placed, high above the ground?

This monumental task called for a specialised ally, *Tarini*. A magnificent, purpose-built structure, moving with deliberate power and balletic precision along the nascent pathway. This ingenious machinery was designed to delicately cradle each segment of the elevated track, lifting it skyward, and then guiding it with exquisite care into its rightful place atop the towering supports. It often worked above the existing flow of life, ensuring minimal disruption below. This powerful yet precise ballet of engineering embodies the commitment to efficiency and safety. A controlled symphony of progress, piece by carefully placed piece.

***TARINI*: BOX GIRDER LAUNCHING GANTRY:**

NUMBER OF *TARINI'S* DEPLOYED ON DELHI-MEERUT CORRIDOR
41

WEIGHT OF *TARINI*
436 METRIC TONS (APPROX)

TOP PHOTO GHAZIABAD SITE
LEFT PHOTO SAHIBABAD STATION

The Unseen Cushions of Comfort

Beneath the massive structures that bear the trains, there lies a crucial unseen component: the bearings that act as the very cushions of the railway.

For a system designed to serve for generations, ensuring these vital connections endure with minimal care was paramount. Traditional elastomeric bearings used in metro rails often require frequent attention, which can disrupt service and add to ongoing efforts. This led to a meticulous search for a superior solution. The answer lay in adopting an advanced, resilient design – the spherical bearing.

ULTRA-HIGH MOLECULAR WEIGHT POLYETHYLENE (UHMWPE) IS THE SLIDING MATERIAL IN SPHERICAL BEARINGS

ACCUMULATED SLIDING PATH OF 200 KM, APPROX 20 TIMES OF CONVENTIONAL BEARINGS

COMPRESSIVE STRENGTH OF 180 N/MM^2 AT 30^0 C, DOUBLE OF CONVENTIONAL BEARINGS

DESIGN LIFE OF 50 YEARS

GULDHAR SITE

EASTERN PERIPHERAL EXPRESSWAY CROSSING, DUHAI

Bridges of Ingenuity

The Delhi-Meerut corridor encountered situations that demanded extraordinary solutions – points where the tracks had to soar over immense obstacles. Grand rivers, intricate railway lines weaving, or bustling expressways, needed distinct solutions to the box girders employed elsewhere for the elevated corridor. In these challenging locations special steel spans were employed.

These structures are more than just bridges; they are bespoke works of engineering art. Crafted with precision in dedicated facilities; their individual parts were carefully transported and then meticulously assembled on-site.

KEY PLACES STEEL SPANS INSTALLED:

SPAN NEAR SAHIBABAD STATION
150 METRES

SPAN OVER VASUNDHARA RAILWAY LINE
73 METRES

SPAN OVER DELHI-MEERUT EXPRESSWAY
50 METRES

NUMBER OF STEEL SPANS UTILISED
17

KONDLI SPAN (DELHI):

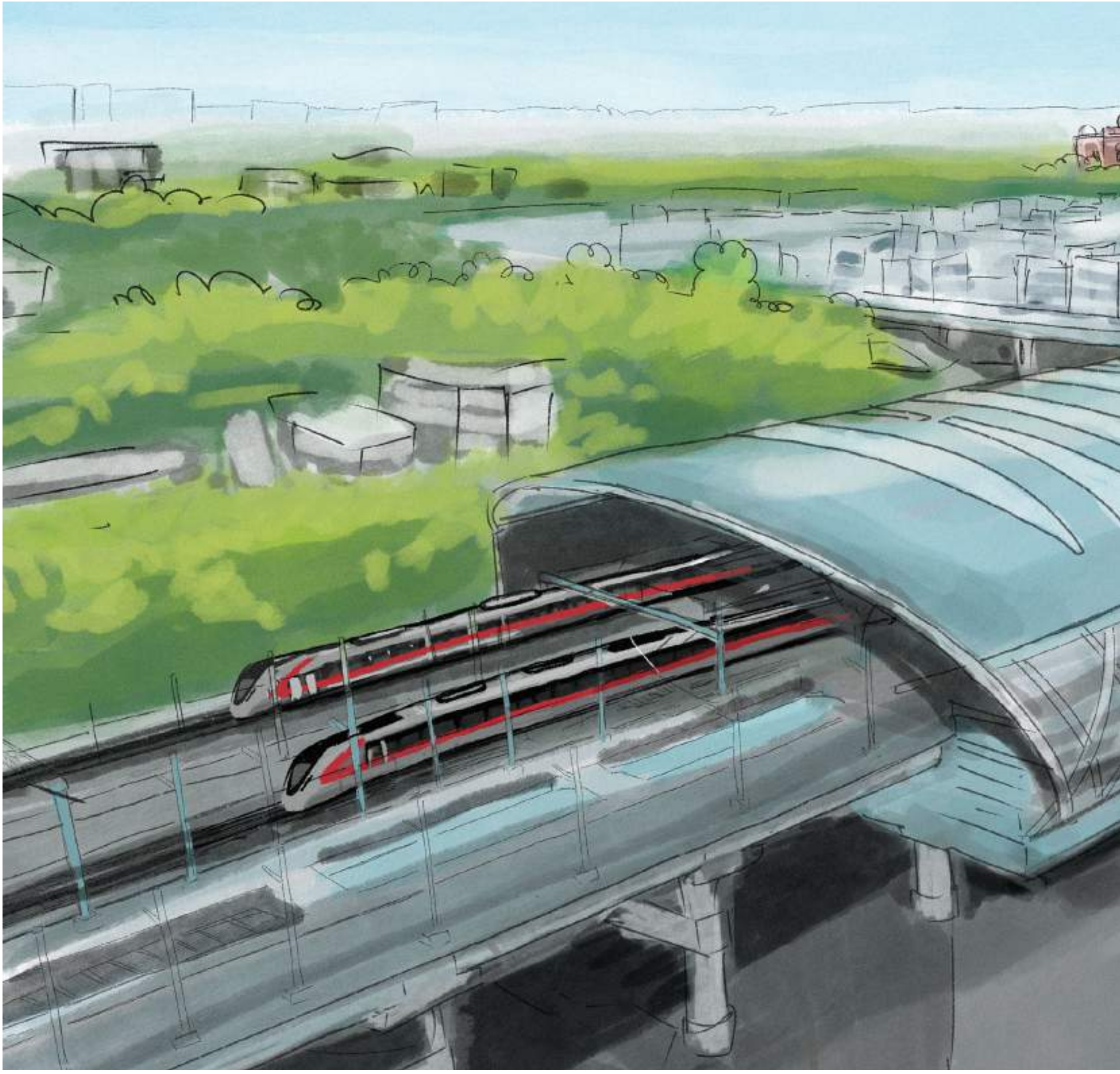
NUMBER OF STEEL SPANS USED
6

COMBINED LENGTH
360 METRES

WEIGHT OF EACH STEEL SPAN
380 TONNES

The journey of building the Namo Bharat corridor brought another unique challenge to the forefront. At Kondli, where the path needed to cross a significant urban drain, a conventional solution wouldn't suffice. Here, a series of special spans were required to bridge this obstacle. This particular location marks the only point on the entire corridor where such a sustained sequence of these magnificent steel structures was necessary. It is a true testament to the project's ability to adapt and innovate.

KONDLI SPAN BRIDGE



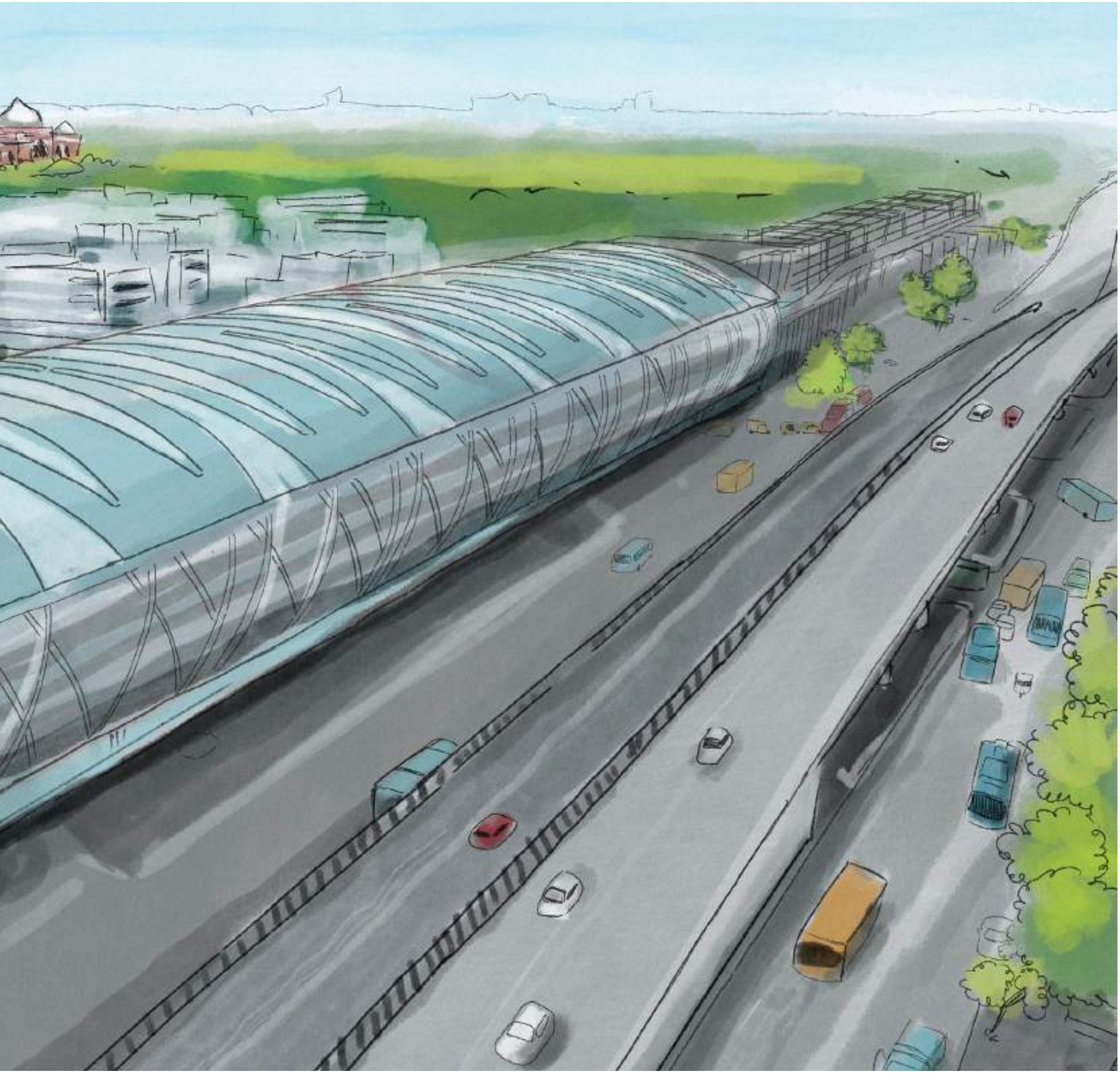


ILLUSTRATION OF THE SARAI KALE KHAN STATION

Subterranean Optimisation

Crafting pathways through the earth required careful thought, especially regarding the tunnels' very dimensions. Initial suggestions envisioned passages, significantly wider than those typically seen in our urban transit systems. While offering ample space, such a scale presented considerable complexities and costs.

This called for a meticulous re-evaluation, a dedication to finding the perfect balance. Engineers embarked on a thoughtful exploration, iteratively refining the design with unwavering commitment to safety and efficiency. The result was a triumph of optimisation.

OPTIMISING IN TUNNEL DIAMETER:
8 METRES TO 6.5 METRES

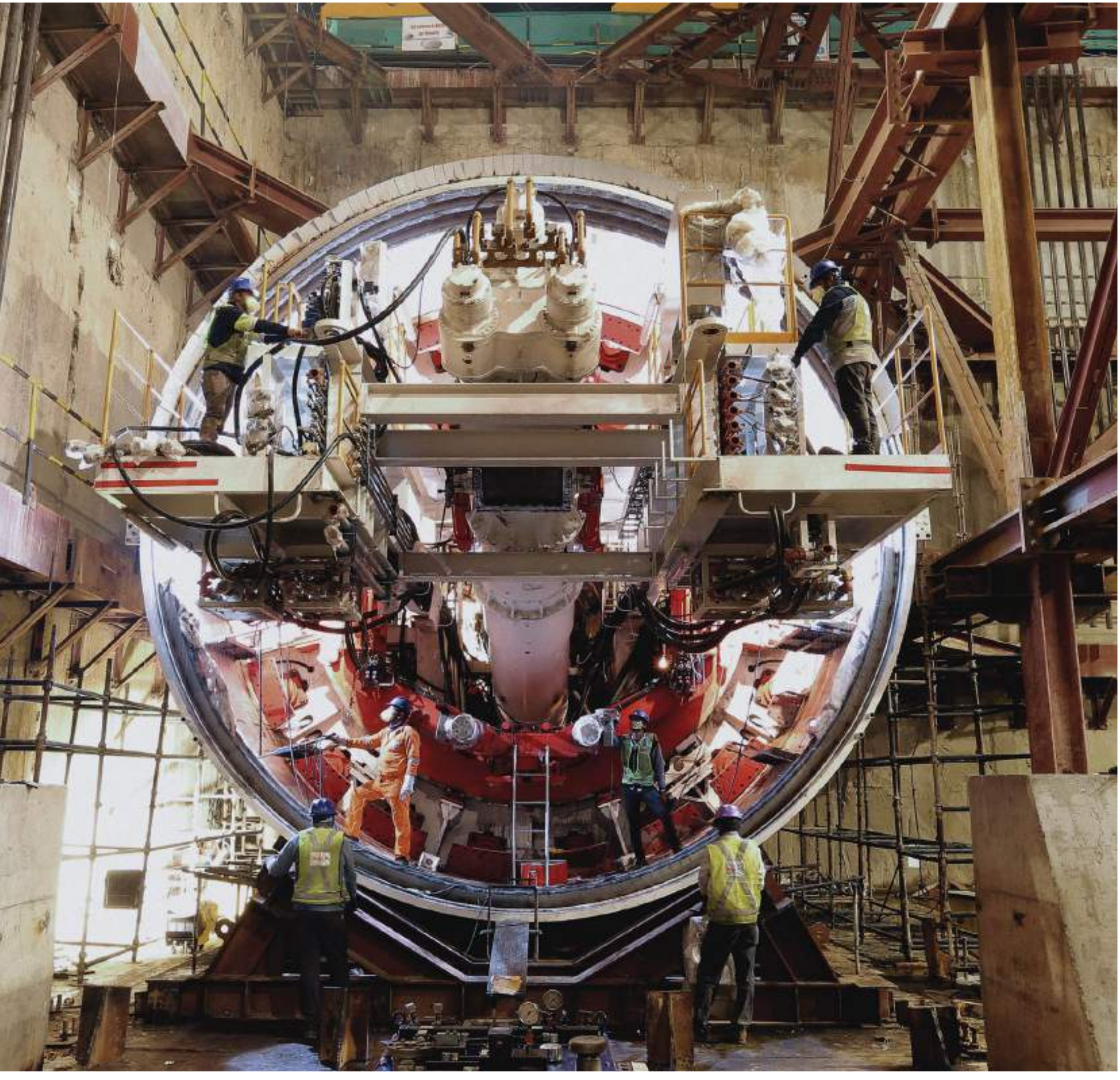
DELHI-MEERUT CORRIDOR UNDERGROUND PATHWAY:
12 KM

NAMO BHARAT TUNNEL, MEERUT

Tunnel Boring Innovation

Bringing these graceful underground passages to life required more than just design; it demanded a powerful, unwavering force. This is where the magnificent *Sudarshan* Tunnel Boring Machines entered the scene, true titans of engineering designed to carve through the earth with incredible precision.

A silent giant working deep beneath the surface. These remarkable machines, with their rotating heads, meticulously bore through the soil, simultaneously crafting the tunnel and lining it with pre-formed segments, much like building a robust, continuous ring as they advanced.



NUMBER OF
SUDARSHAN TBMs USED
07

DIAMETER OF EACH
7.1 METRES
(CUTTER HEAD)

BHAISALI STATION

6.5
METRES DIAMETER

MEERUT CENTRAL STATION

Breakthroughs by the Tunnel Boring Machine Surdarshan. A testament to the indigenously developed technology utilised proudly in the construction of the Namo Bharat.

CIVIL WORK PACKAGES

Delhi-Meerut Corridor construction was streamlined into 8 distinct packages.

PACKAGE ONE

8 KM

Includes two elevated stations viz. Sahibabad and Ghaziabad.

PACKAGE TWO

9 KM

Includes two elevated stations viz. Guldhar and Duhai.

PACKAGE THREE | LOT 1

15.7 KM

Includes two elevated stations viz. Murad Nagar and Modi Nagar South.

PACKAGE THREE | LOT 2

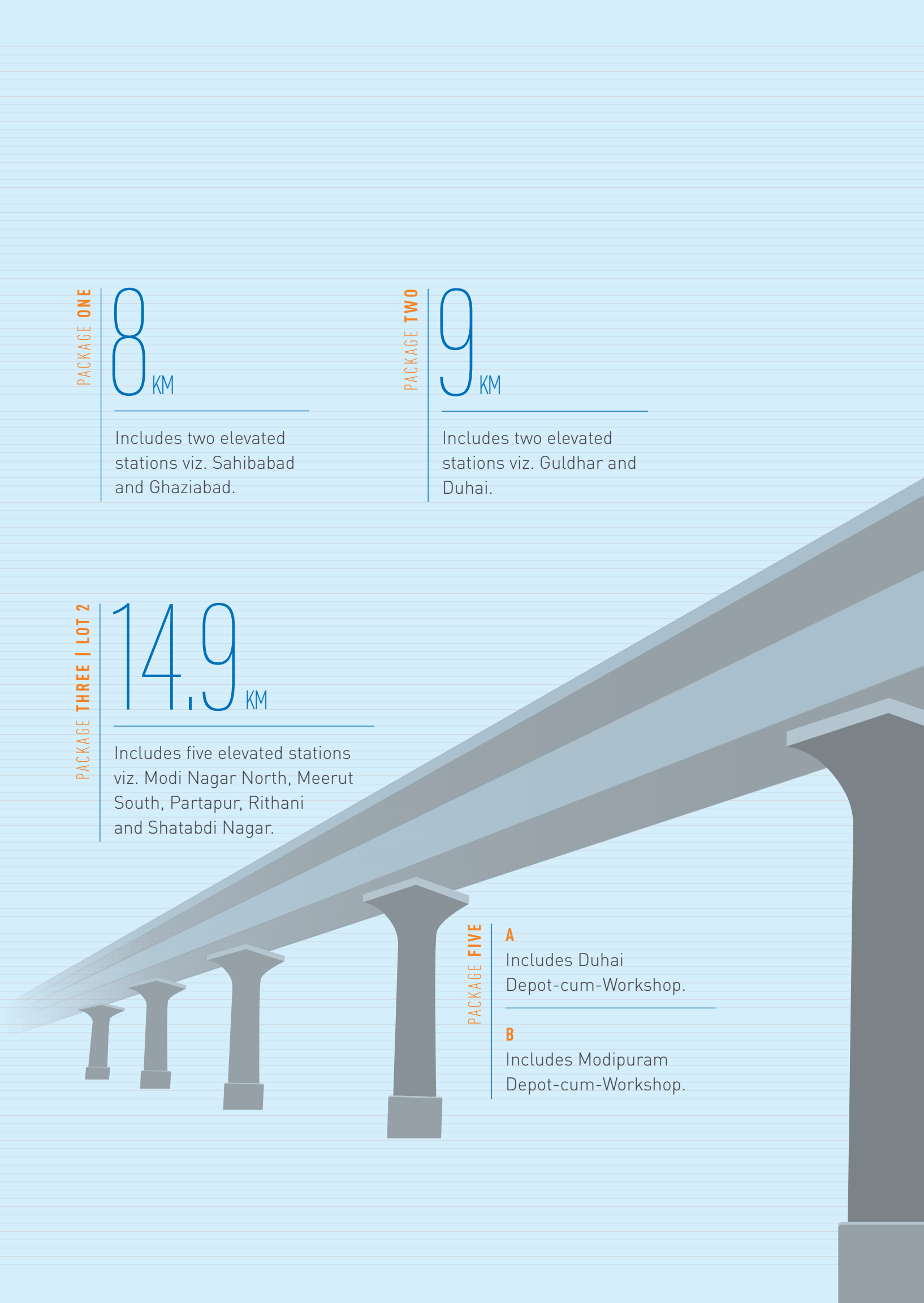
14.9 KM

Includes five elevated stations viz. Modi Nagar North, Meerut South, Partapur, Rithani and Shatabdi Nagar.

PACKAGE FOUR

6.7 KM

Includes one underground station at Anand Vihar.



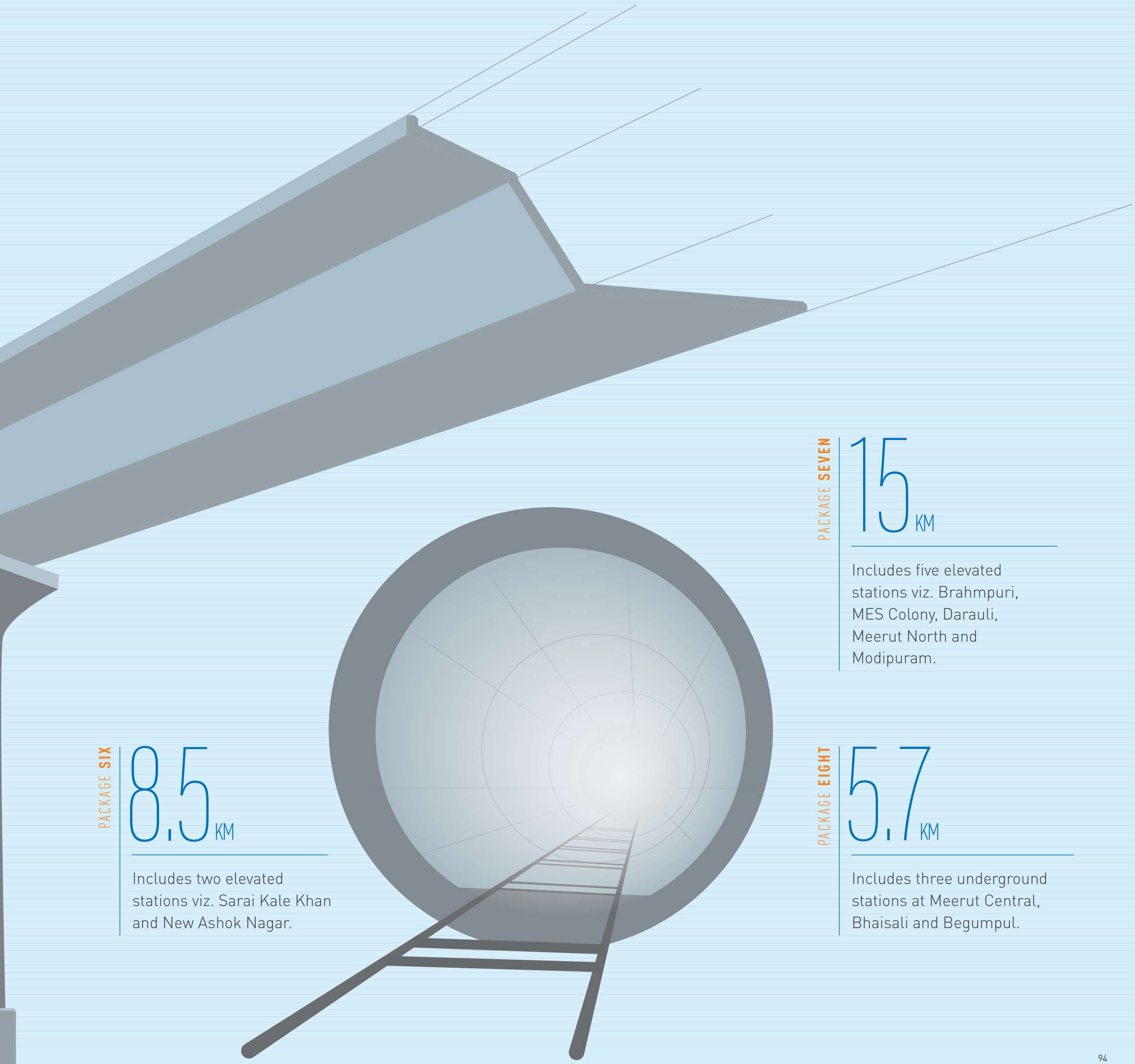
PACKAGE FIVE

A

Includes Duhai Depot-cum-Workshop.

B

Includes Modipuram Depot-cum-Workshop.



PACKAGE **SEVEN**

15 KM

Includes five elevated stations viz. Brahmpuri, MES Colony, Darauli, Meerut North and Modipuram.

PACKAGE **SIX**

8.5 KM

Includes two elevated stations viz. Sarai Kale Khan and New Ashok Nagar.

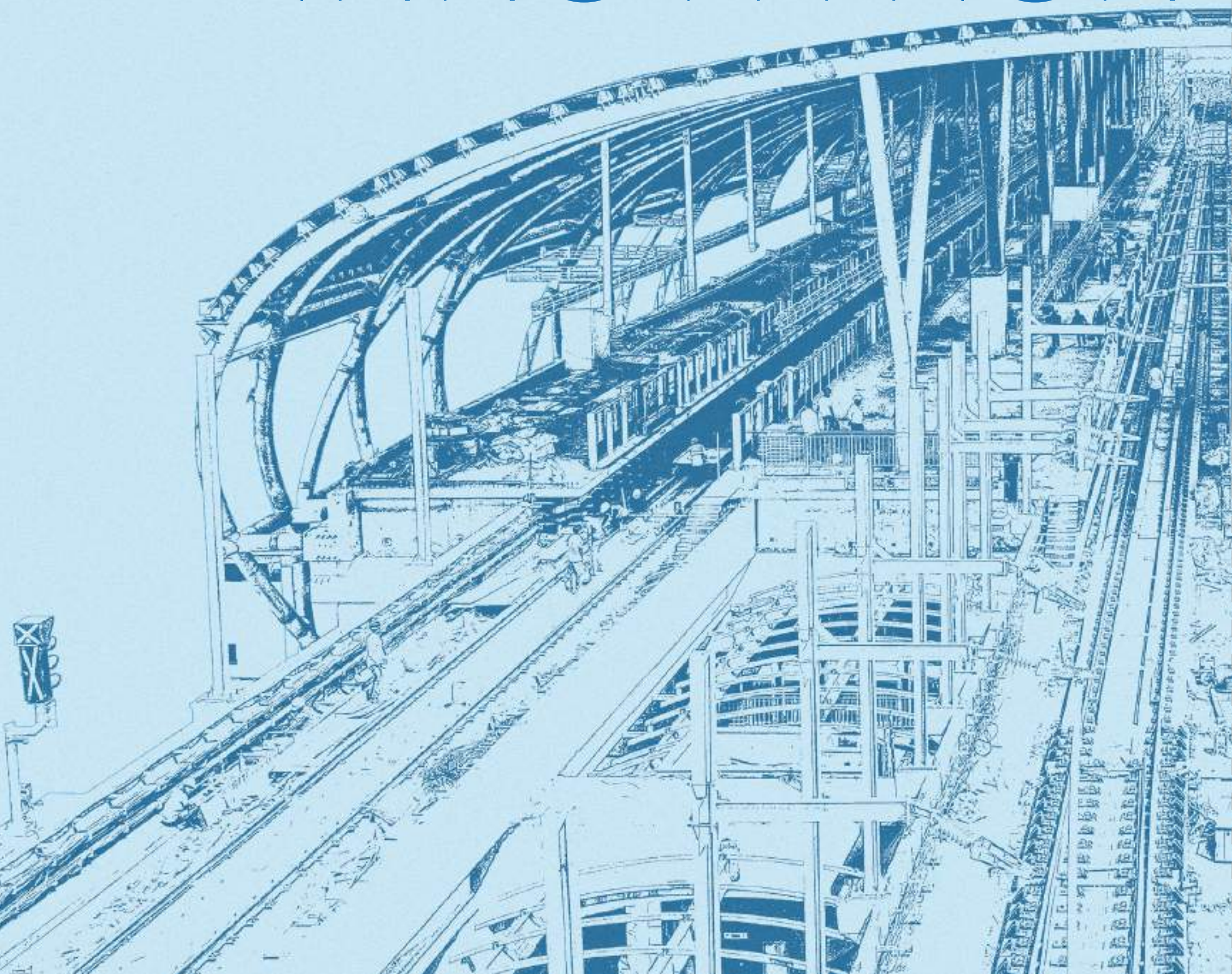
PACKAGE **EIGHT**

5.7 KM

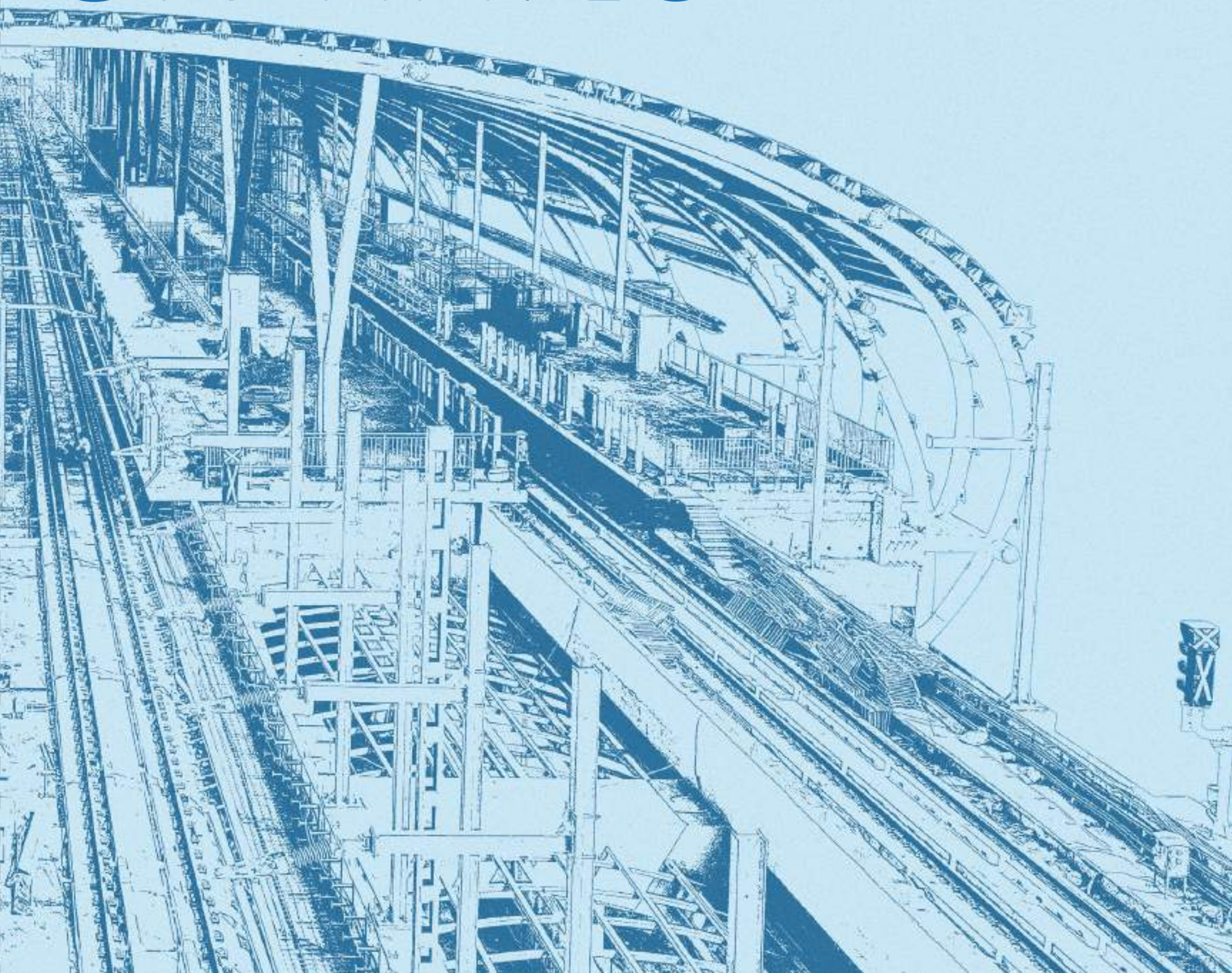
Includes three underground stations at Meerut Central, Bhaisali and Begumpul.

4

INNOVATION

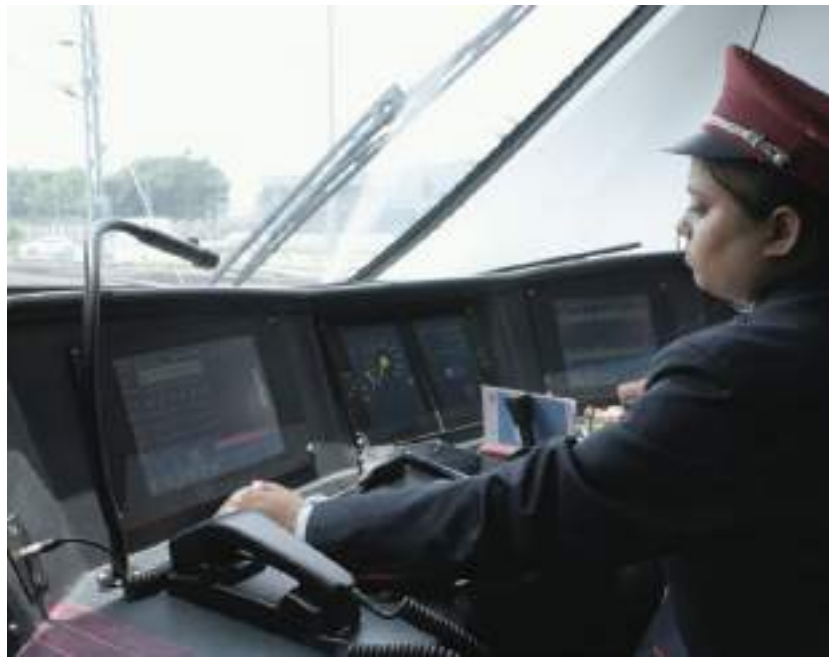


ON RAILS



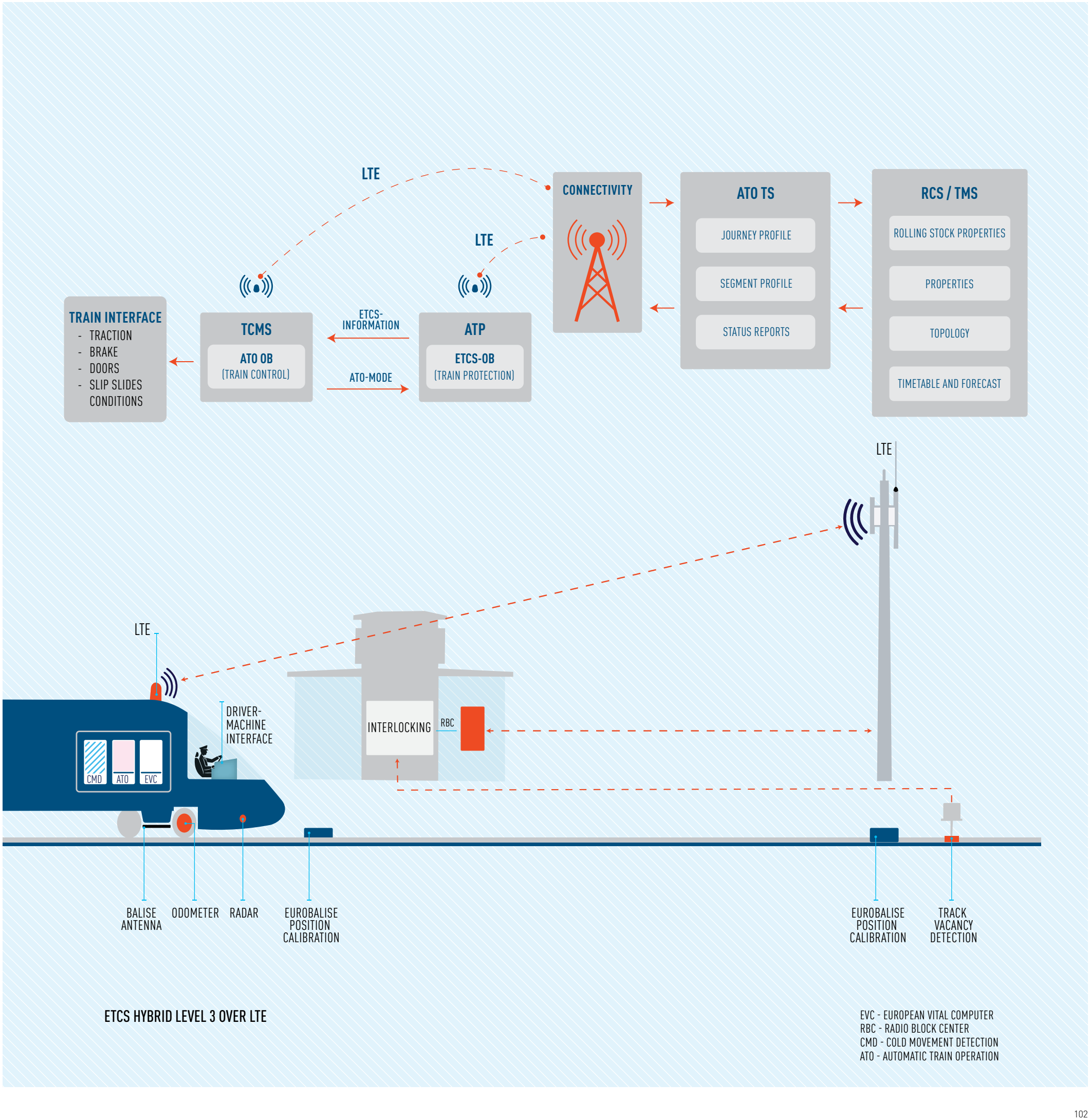
Having crafted the physical framework for Namo Bharat, our focus now shifts to the ingenious elements that truly set this system apart. Here we delve into the pioneering innovations woven into every aspect of the RRTS, from its new-age pathways to its advanced power systems and the very trains themselves. We uncover the cutting-edge technologies and smart choices that transform a transit line into a symbol of India's engineering prowess, delivering unparalleled efficiency, comfort, and speed for the future of regional travel.

Global First Implementation of ETCS Hybrid Level 3 over LTE



For a system designed for such remarkable speed and interconnectedness, a truly advanced form of guidance was essential. This is where ETCS Hybrid Level 3 signalling comes into play.

A sophisticated digital brain overseeing every train, communicating instantly and continuously to ensure perfect harmony on the tracks. This is not just about controlling trains; it is about enabling a seamless dance of movement, allowing trains to transition effortlessly from one corridor to another, a pioneering feature for our nation. This technology is designed to be universally compatible, meaning different trains can navigate the same pathways with absolute precision, fostering efficiency and future flexibility.



ETCS HYBRID LEVEL 3 OVER LTE

EVC - EUROPEAN VITAL COMPUTER
RBC - RADIO BLOCK CENTER
CMD - COLD MOVEMENT DETECTION
ATO - AUTOMATIC TRAIN OPERATION

Cutting-edge Wireless Network

This extraordinary leap in velocity is not the work of a single technology, but a powerful synergy of advanced systems. An orchestrator of motion that precisely guides each train, coupled with a vigilant digital guardian ensuring every switch and signal is perfectly aligned. An invisible hand smoothly optimising acceleration and braking, all communicating flawlessly over a cutting-edge wireless network. This harmonious collaboration, a first of its kind, creates an environment where trains can operate at previously unheard-of speeds in India, with incredible frequency and safety.

GULDHAR STATION

TELECOM EQUIPMENT ROOM

SECURITY CONTROL CENTRE

OPERATIONAL CONTROL CENTRE (OCC)

Selection of Rolling Stock.

Powering across the cutting-edge tracks, the very heart of the Namo Bharat experience lies in its Rolling Stock – the sleek, aerodynamic trainsets themselves. These are truly first-of-their-kind in India, engineered for high-speed and high-frequency regional transit. Designed to be the fastest, most comfortable, and safest commuter transport in NCR, they will effortlessly slash travel time between Delhi and Meerut to under 60 minutes.

DESIGNED AT ALSTOM'S HYDERABAD ENGINEERING CENTRE

15 YEARS COMPREHENSIVE MAINTENANCE OF TRAINSETS

MANUFACTURED IN SAVLI, GUJARAT

30 TRAINSETS FOR DELHI-MEERUT CORRIDOR

LIGHTWEIGHT STAINLESS STEEL COACHES ON STANDARD GAUGE
3.2 M WIDE

DESIGN/ OPERATING SPEED:
180/ 160 KMPH

AERODYNAMIC PROFILE WITH LONG NOSE AND PLUGIN TYPE DOORS

6-CAR EMU TRAINSET

REGENERATIVE BRAKING

FULLY AIR-CONDITIONED

A proud testament to the nation's capabilities, the entire rolling stock is 100% manufactured in India, embodying the spirit of self-reliance. Operated by the advanced ETCS Hybrid Level 3 over LTE signalling system – another Indian first – these self-propelled electric trains are also a key enabler of the crucial interoperability feature across all priority corridors, ensuring passengers enjoy seamless journeys without ever having to change trains.

ALSTOM FACTORY SAVLI, GUJARAT

Transportation of Namo Bharat trainsets from Savli, Gujarat to Duhai Depot

AJAY CRANE SERVICE
AJAY CRANE SERV
AJAY CRANE SERVICE DEMAG
LIEBHERR

Plugin Type Doors

As Namo Bharat accelerates to its impressive 160 kmph operational speed, every aspect of its design is fine-tuned for performance and passenger comfort. A subtle yet significant innovation contributing to this is the use of automatic plugin type wide doors. Unlike traditional sliding doors, these specially designed doors create a flush, continuous surface with the train's exterior when closed.

This seemingly minor detail plays a crucial role in minimising air friction, or drag, which becomes a major factor at high velocities. By reducing drag, the trains operate more efficiently, consuming less energy. Crucially, these plugin doors also significantly reduce noise levels, both inside the cabins and for those near the tracks, enhancing the quiet and comfortable experience that defines a Namo Bharat journey. It is a testament to how meticulous engineering contributes to superior travel.

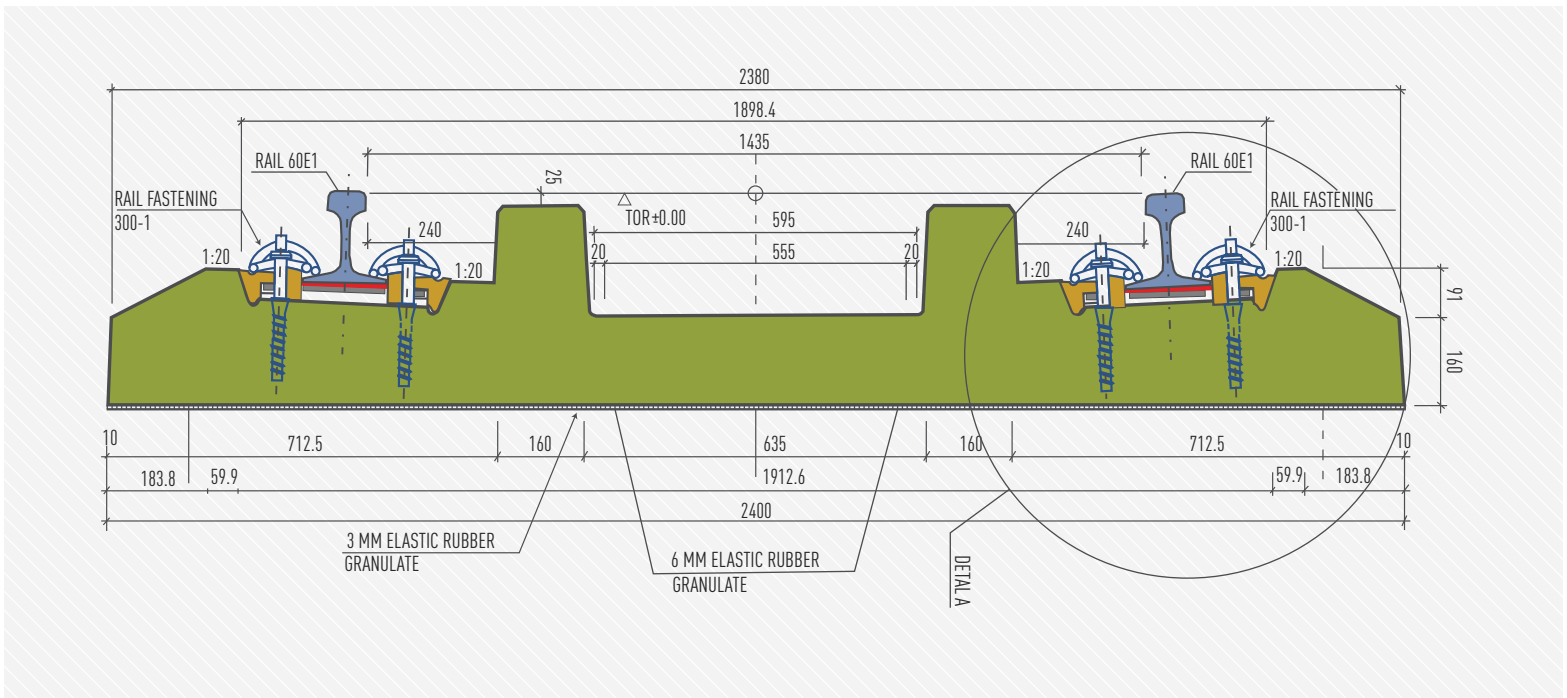
Ballastless Tracks

Imagine a journey so smooth, so serenely quiet, that the world outside simply glides by. This remarkable experience is no accident; it is woven into the very fabric of Namo Bharat's path, a story that begins beneath the train itself.

For the first time in our nation's history, this system features a revolutionary ballastless track, designed to support a high-speed system. The project chose a proven precast "Slab Track Austria" system, known for its performance and low maintenance. This choice ensures a quiet ride, free from the vibrations and dust of traditional tracks, transforming every journey into an oasis of calm. To build these, a state-of-the-art precast slab production facility was established right here in India, capable of producing thousands of perfectly crafted slabs.

TRACK SLAB FACTORY MEERUT

This facility, a testament to our nation's ingenuity, uses a completely mechanized system and IT-enabled coordination to achieve unmatched precision. The precast method ensures superior quality control and faster construction, while the floating design allows for easy replacement if needed.



GULDHAR SITE

DESIGNED FOR SPEEDS UP TO
180 KMPH

NUMBER OF SLABS FOR MAINLINE:
44,000

TURNOUT SLABS:
154 SETS

NUMBER OF TKMs INSTALLED ON MAINLINE:
167

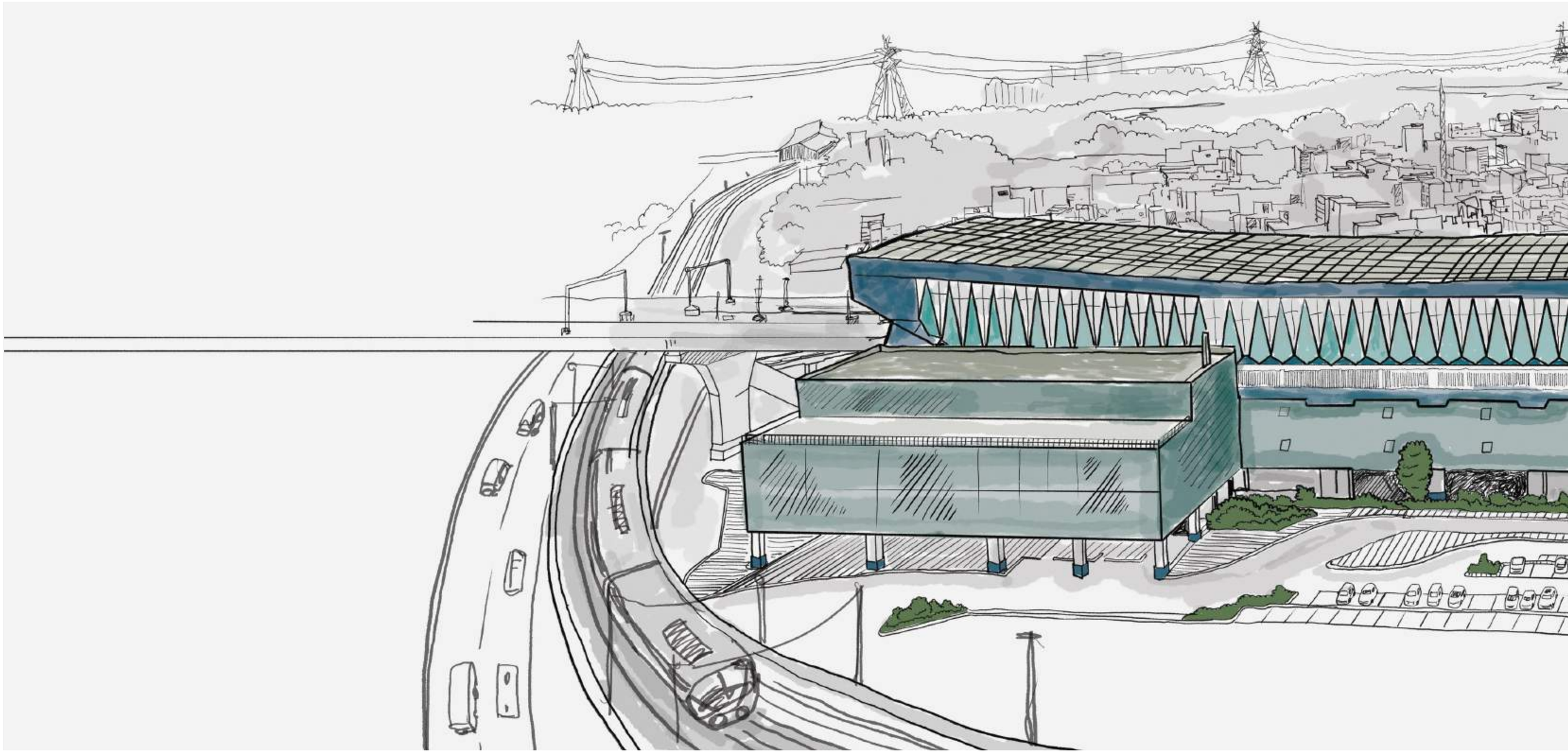
SAHIBABAD STATION

Power Supply and Traction System

With the physical pathways firmly in place, the lifeblood of Namo Bharat's journeys beckoned: its vital electrical supply. This was not merely about plugging in; it was a thoughtful decision, meticulously studied to ensure unwavering energy for a system of this scale and grandeur. Expert agencies from across the globe collaborated, exploring different possibilities to power the trains and stations. Through intense simulations, they weighed various approaches.

GHAZIABAD STATION

STANDING TALL AT 26 METRES



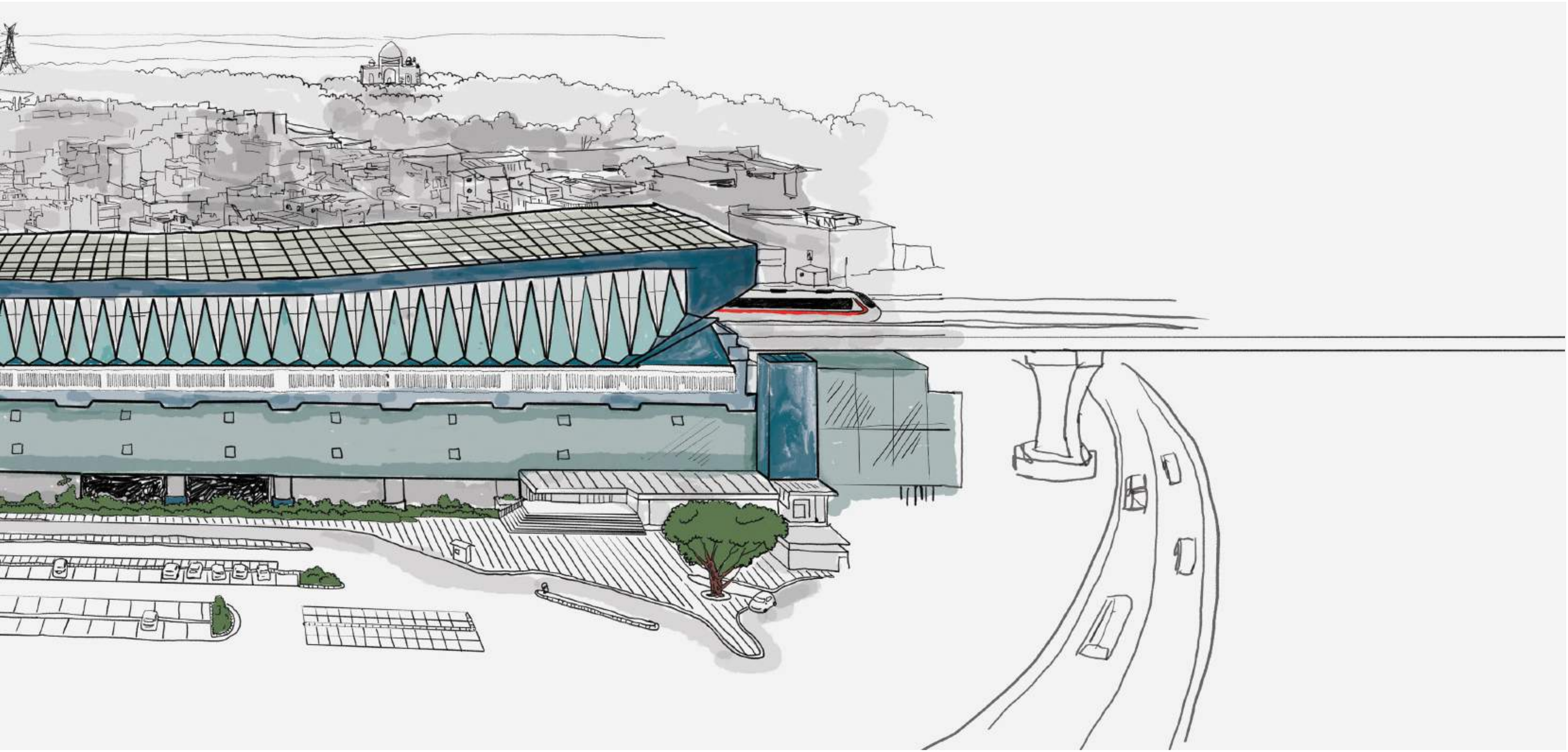


ILLUSTRATION OF THE GHAZIABAD STATION

Receiving Sub Stations

RSS MURAD NAGAR

A vital step in seamless mobility was ensuring that energy flowed uninterrupted, a constant, reliable pulse throughout the entire system. The Receiving Sub Stations (RSS) are built with extraordinary foresight: they are designed so that even if RSS or its part encounters an issue, the required power can be fed from the adjacent RSS so that the entire system remains unaffected. This means the journey, and the station's vital functions, simply carry on without a pause.

Along the corridor, multiple RSS units stand ready, each drawing its strength from robust, high-capacity power cables. Within each RSS adequate capacity transformers are working with a dedicated twin always standing by as a silent protector. This ensures a flawless, unwavering supply, not just to propel the trains forward, but also to light the stations, power the escalators, and keep every system alive, guaranteeing that the promise of immaculate travel is always met.

100% BACKUP PROVIDED FOR 25KV TRAIN SUPPLY AND 33KV AUXILIARY POWER SUPPLY

40/50 MVA TRANSFORMERS FOR TRACTION AND 15/20 MVA FOR AUXILIARY

DESIGNED WITH N-1 REDUNDANCY

5 RSS UNITS

GAS INSULATED SWITCHGEARS USED AT ALL VOLTAGE LEVELS

ACTIVE POWER FILTERS PROVIDED AT ALL RECEIVING SUB STATIONS

ANAND VIHAR STATION

POWER SYSTEM CHOSEN FOR NAMO BHARAT TRAINS 1x25KV

Some options were simply too demanding on the network or incompatible with the existing power infrastructure. The path forward became clear: a 1x25kV, 1-pH system emerged as the perfect fit. It promised a smooth and even distribution of power, essential for connecting the bustling heart of the region. Even when faced with unexpected challenges, this chosen system demonstrated its remarkable resilience, ensuring the trains would continue their swift, dependable service. It was the most efficient, robust, and truly the ideal lifeblood for Namo Bharat trains.

DU HAI SITE

The Pulse of Progress

Building on the foundation of a thoughtfully chosen power system, the true brilliance of Namo Bharat's energy supply lies in its subtle yet powerful innovations.

Every component, from the initial intake of vast energy to its final delivery, has been meticulously refined. Advanced protection systems stand guard, ensuring purity in the power flow. The overhead lines that gracefully guide the trains are not merely wires, but finely tuned conduits, engineered with superior materials for enhanced endurance and optimal performance. Even the advanced cantilevers that hold them aloft are designed for enduring strength and minimal maintenance.

GULDHAR SITE

ALUMINIUM CANTILEVERS USED INSTEAD OF CONVENTIONAL GALVANISED STEEL CANTILEVERS

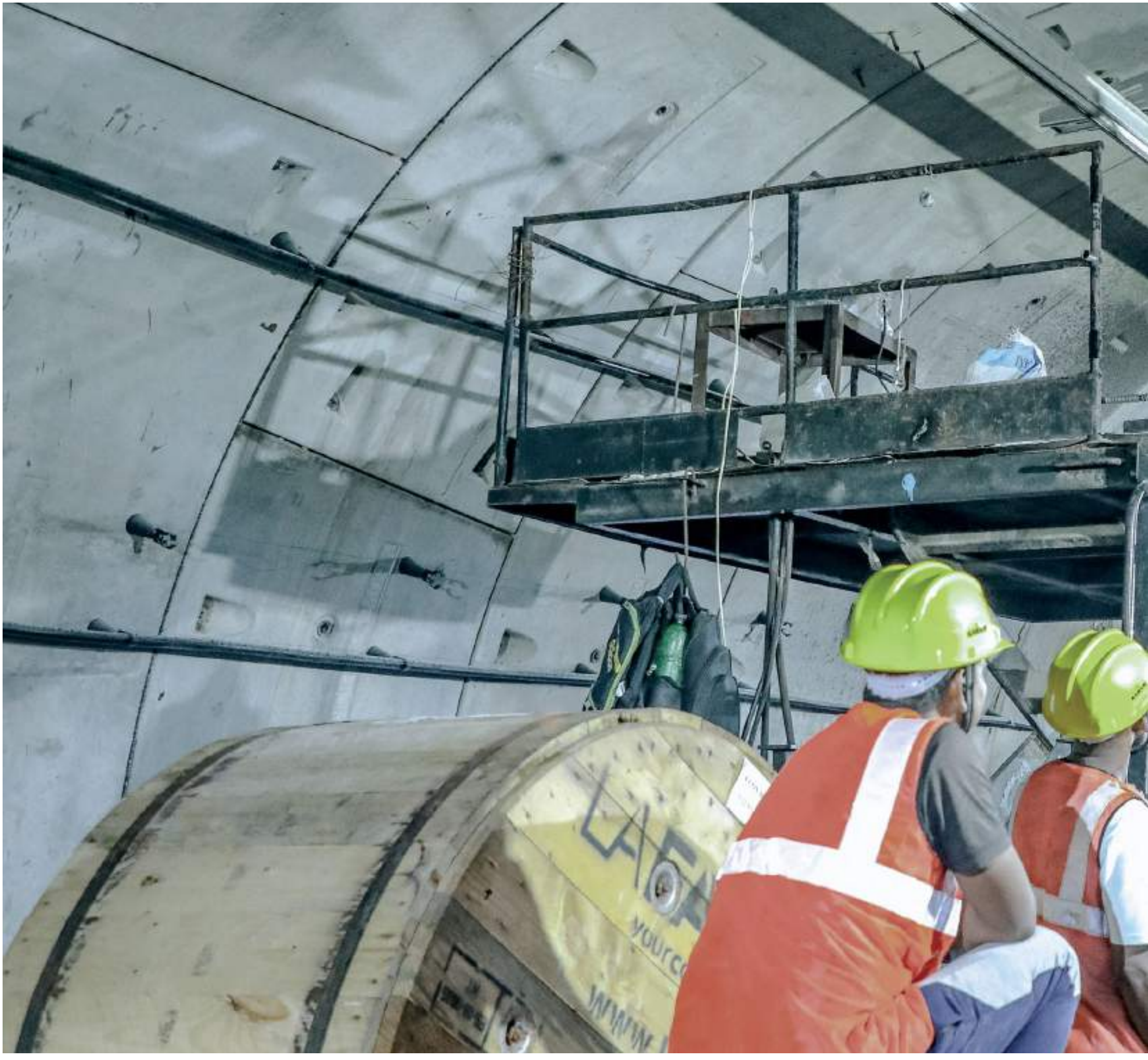
INSULATOR CREEPAGE DISTANCE INCREASED TO 1600 MM TO ENSURE THAT THE DUST PARTICLES, IN HEAVY POLLUTION, DO NOT RESULT IN CURRENT LEAKAGE

NEUTRAL SECTION AT FEEDING POINT FROM RSS HELPS TO IMPROVE VOLTAGE PROFILE

PROVEN SPRING TYPE ATD HAVE BEEN USED TO CATER TO HIGHER TENSION IN OCS

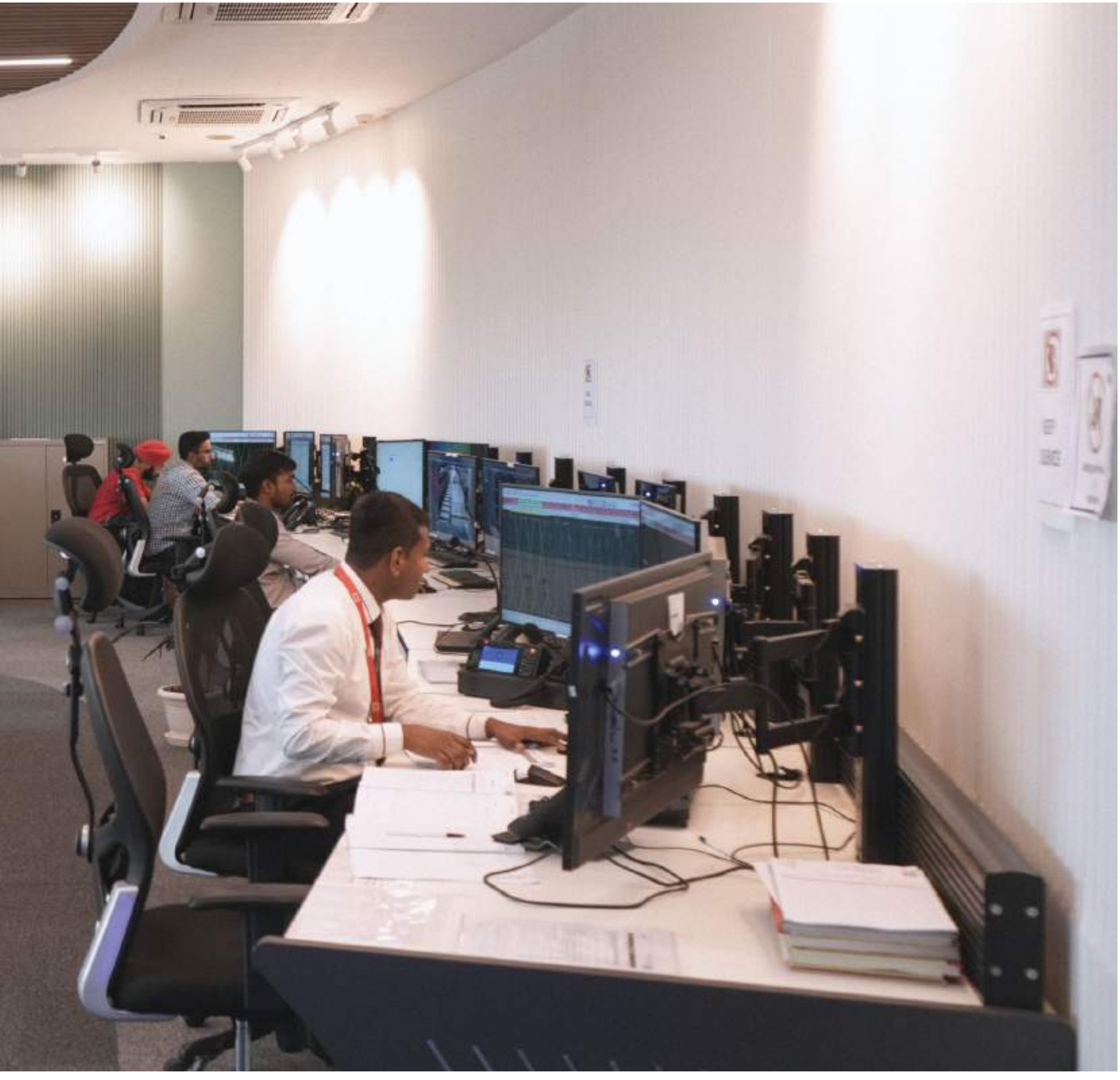
CU-AG CONTACT WIRE USED WITH OPERATING TEMPERATURE LIMIT OF 100^{0}C

120 SQ.MM CU-MG CATENARY WIRE USED WHICH HAS MORE MECHANICAL STRENGTH AND ENVIRONMENT FRIENDLY



Rigid Overhead Catenary System (ROCS): The power to the trains in tunnels and underground stations is fed with ROCS, which ensures reliable power supply with low maintenance.

ANAND VIHAR STATION



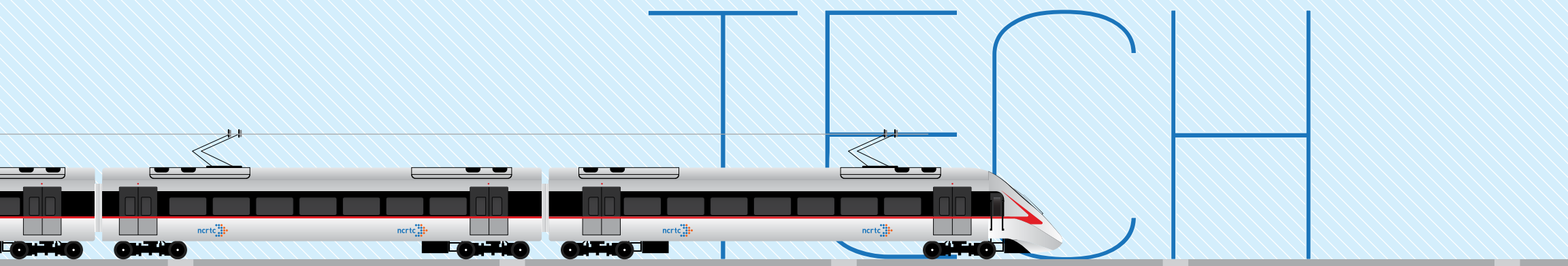
OPERATIONAL CONTROL CENTRE (OCC)

A single project archive, accessible from anywhere by anyone with access

COMMON DATA ENVIRONMENT

ETCS HYBRID LEVEL 3 OVER LTE

European Train Control System is a radio technology based signalling system

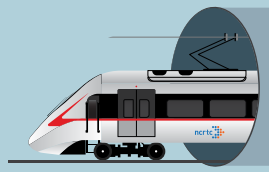


A groundbreaking system that acts as a digital twin of the entire infrastructure

iDREAMS SYSTEM

BUILDING INFORMATION MODELLING (BIM)

3D design modelling to explore intricate details of the project by all stakeholders



SPEED TECH PLATFORM

An ingenious, in-house developed digital dashboard showing live updates of the project

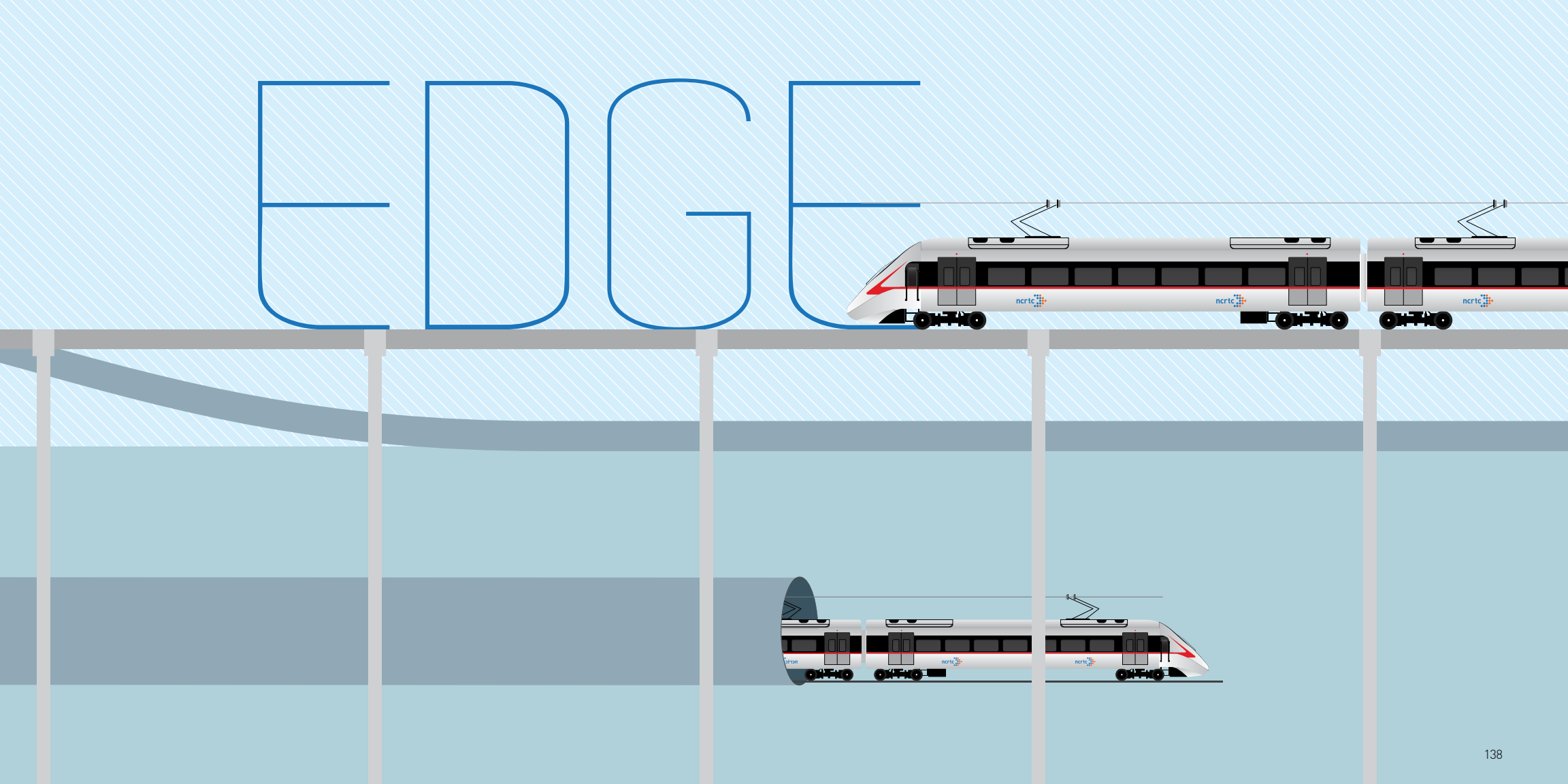
CONTINUOUS OPERATING REFERENCE STATION (CORS)

A network of reference points along the corridor providing accurate location data within 10 mm

LTE RADIO

Long Term Evolution Radio enables high-speed wireless voice and data communication

EDGE



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Towards Concourse

TESTING & TRAINING

Having meticulously designed, engineered, and infused Namo Bharat with cutting-edge technology, the ultimate moment arrived: transforming dreams into reality. Going behind the scenes, revealing the rigorous journey of testing and training that breathed life into this ambitious vision. We witness the meticulous trials, the fine-tuning of every component, and the comprehensive preparation of the dedicated individuals who would eventually bring this new era of swift, comfortable travel to the public.

The Verification Badge

Following the rigorous design and construction phases, the moment arrived to awaken the grand vision of Namo Bharat. This was not merely about assembling parts; it was about ensuring every intricate component, every hidden connection, and every visible structure performed in perfect harmony, ready for the immense task ahead.

DUHAI DEPOT

SARAI KALE KHAN

This pivotal stage began with a meticulous series of verifications, a symphony of checks and balances. Dedicated teams meticulously examining every inch of the newly laid tracks, the robust overhead power lines, and the sophisticated signalling systems. Every bolt, every circuit, every automated command was put through its paces, not just individually, but as an integrated whole.

This exhaustive process, undertaken with unwavering precision, ensured that the entire corridor, from its deepest subterranean passages to its highest elevated spans, was resilient, responsive, and utterly reliable. It was a crucial phase of proving, transforming potential into absolute assurance, ensuring safety is paramount for the journeys of tomorrow.

TESTING OF INDIGENOUSLY MANUFACTURED PLATFORM SCREEN DOORS

TESTING OF COMPRESSIVE STRENGTH OF CONCRETE CUBES IN QUALITY TESTING LAB

MEASUREMENT OF SLAB DIMENSIONS BY FARO SYSTEM

RCPT TESTING FOR DURABILITY OF CONCRETE

TESTING OF TRAINSETS IN SAVLI, GUJARAT

OSCILLATION TRIALS OF TRAINSETS AT DUHAI DEPOT

SIGNALLING TESTING IN NAMO BHARAT

SAHIBABAD SITE

Rhythmic Rehearsal

With every individual component meticulously verified, the project moved from static inspection to dynamic motion. This was the moment the dream truly began to breathe. The trains, sleek and silent, gliding along the newly laid tracks, not yet carrying passengers, but each journey a vital rehearsal for the future.

GHAZIABAD SITE

TRIAL RUN FOR THE FIRST
NAMO BHARAT TRAIN ON
25TH DECEMBER 2022

FIRST TRIAL RUN FROM DUHAI TO MEERUT
SOUTH STARTED ON
29TH DECEMBER 2023

TRIAL RUNS BETWEEN SAHIBABAD AND
NEW ASHOK NAGAR IN
OCTOBER 2024

TRIAL RUN BETWEEN MEERUT SOUTH AND
SHATABDI NAGAR STARTED ON
9TH FEBRUARY 2025

TRIAL RUN ON THE BALANCE SECTION
APRIL 2025

This phase was a symphony of precise observation and subtle adjustment. Teams monitored every vibration, every signal, every automated response, ensuring that the system functioned with seamless fluidity at its intended high speeds. It was about making incremental refinements to optimise performance and responsiveness. Each run brought deeper insights, allowing for the precise calibration of every parameter, guaranteeing that when the doors finally opened to the public, Namo Bharat would deliver not just speed, but an experience of unparalleled smoothness and unwavering reliability.

Nurturing the Workforce

As the grand machine of Namo Bharat approached its perfection, the focus broadened from steel and circuits to the invaluable human element. A system designed for such speed and precision demands not just flawless technology, but also a dedicated corps of individuals, fully equipped to bring its potential to life and ensure every journey is safe and seamless.

OPERATIONAL CONTROL CENTRE (OCC)

This crucial phase involved intensive training, transforming talented individuals into true guardians of the network. Rigorous simulations, hands-on experiences, and deep dives into every operational nuance, preparing staff for every possible scenario. It was about instilling not just knowledge, but a profound sense of responsibility and mastery. This commitment to human excellence ensures that beyond the impressive technology, Namo Bharat pulsates with the competence, dedication, and care of its people, ready to serve with confidence and grace.

INSPECTION BAY LINE AT DUHAI DEPOT

Maintaining the Fleet

Having ensured the system's readiness and equipped its dedicated human team, the final, crucial piece of the operational puzzle fell into place: the perpetual care of the magnificent trainsets themselves. For a fleet designed to operate at such advanced speeds and for generations to come, their continuous well-being is paramount, far beyond just routine checks. This led to a groundbreaking decision: to bundle the long-term, comprehensive maintenance of these pioneering trains directly with their initial design and supply.

WASHING PLANT, DUHAI DEPOT

IBL WORKSHOP, DUHAI DEPOT

LEVERAGING GLOBAL EXPERIENCE IN OPTIMISATION OF MAINTENANCE PRACTICES

LEAN INVENTORY AS LEAD TIME FOR PROCUREMENT IS LOWER FOR OEM

LONG TERM CONTINUITY OF SUPPLY CHAIN

This innovative approach recognises that the creators of these sophisticated machines are best positioned to nurture them throughout their extensive lifespan. It fosters a deep commitment to quality from the very beginning, ensuring that only the finest components are chosen, and that every aspect of the train is designed for effortless upkeep. This means a lean, efficient approach to inventory, access to global expertise, and a focus on ensuring maximum availability and reliability.

CENTRE OF INNOVATION:
APARIMIT

OPERATION CONTROL CENTRE

TRAINING CENTRE

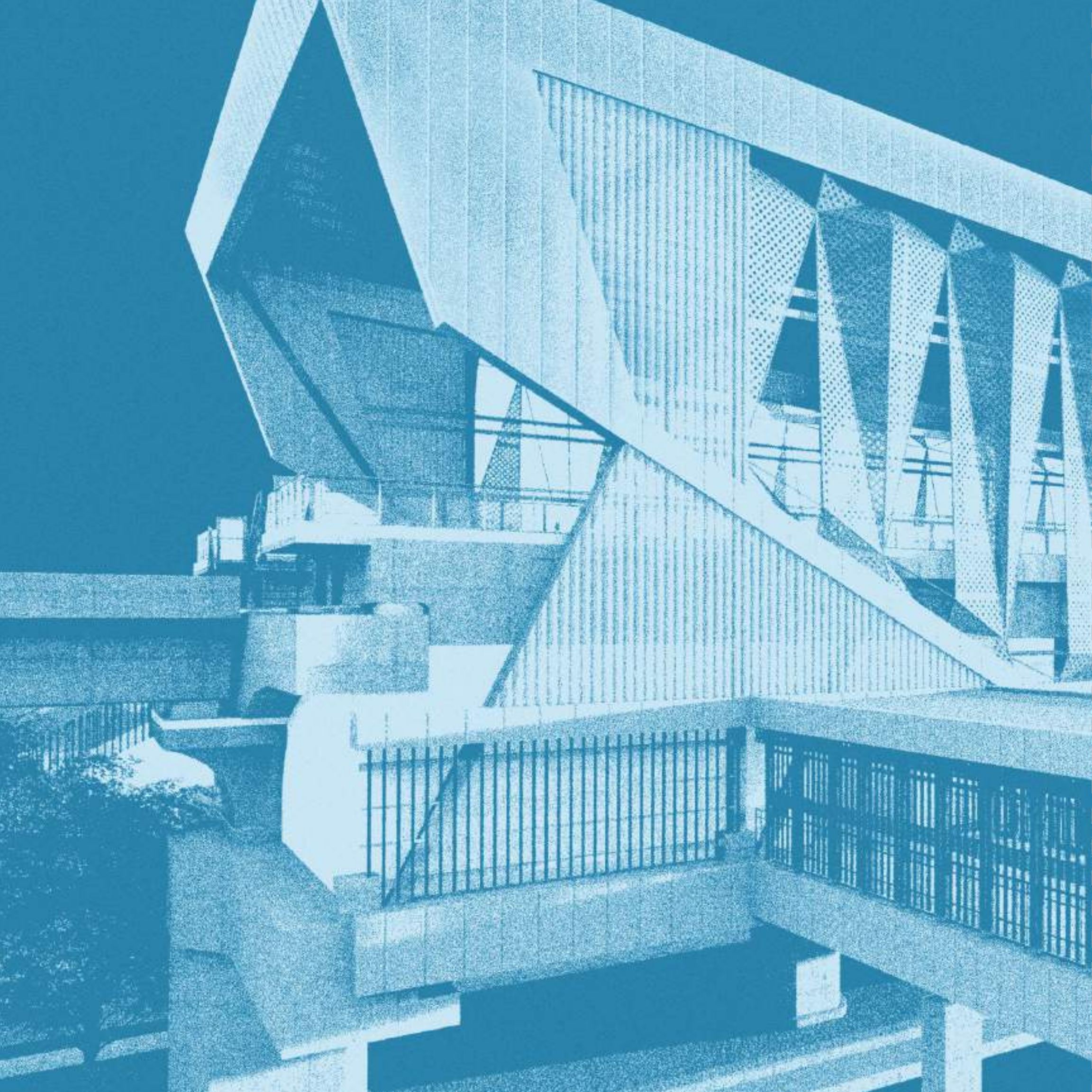
Abode of the Trains

At the heart of operations lies the Duhai Depot, a center of excellence for India's first RRTS. This facility serves as a nerve center for the operation and maintenance of Namo Bharat trains. It houses the "*Aparimit*" Center of Innovation, where technologies like Augmented and Virtual Reality are used for training and development.

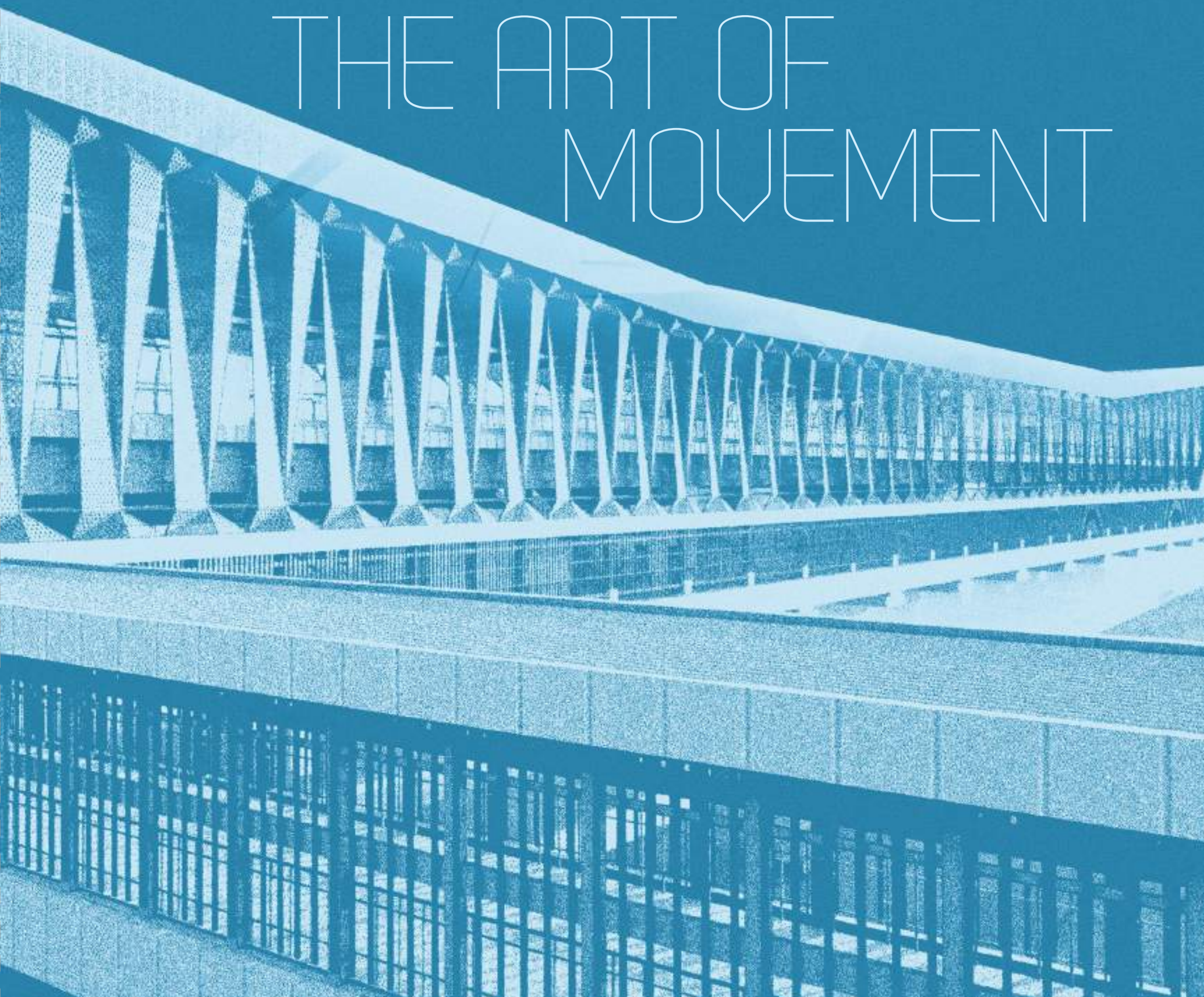
The depot also features a world-class workshop with advanced tools for maintenance and an Operation Control Center (OCC) for real-time monitoring of all train movements and station functions, ensuring unparalleled safety and efficiency.

DUHAI DEPOT

6



THE ART OF MOVEMENT



With the infrastructure meticulously built, cutting-edge technology integrated, and every team member rigorously prepared, Namo Bharat was ready for its ultimate purpose: the commuter. The Art of Movement focuses on the thoughtful design and innovative features that place the passenger at the very heart of the experience. We explore how every detail, from seamless ticketing to enhanced comfort and connectivity, transforms a simple journey into an elevated, effortless, and truly delightful experience.

Automated Fare Collection

With every facet of Namo Bharat designed for passenger delight, the very first interaction – entering the system – was reimagined for ultimate ease. This was about creating an intuitive gateway, symbolising the effortless journeys ahead.

ANAND VIHAR STATION

CONTACTLESS ENTRY / EXIT

OPEN LOOP FROM THE FIRST DAY OF OPERATIONS

QR CODE BASED TICKETING ON NAMO BHARAT CONNECT APP

NATIONAL COMMON MOBILITY CARD: ONE NATION ONE CARD

TWO LEVELS OF AFC VALIDATION: AT CONCOURSE AND PLATFORM LEVEL

GHAZIABAD STATION

Platform Screen Doors

Once the gateway to the journey is gracefully navigated, the next layer of Namo Bharat's thoughtful design unfolds, offering not just ease of access but a promise of security at the edge of the platform. As passengers prepare to board, a sleek and transparent barrier rises, the Platform Screen Doors, which was indigenously developed as a pioneering initiative with BEL.

NCRTC in partnership with BEL has made an effort to indigenously make Platform Screen Doors (PSDs), which were imported so far. These PSDS, made in the country, have been installed at the Duhai Depot station.

SAHIBABAD STATION

- SYSTEM DESIGNED AS PER SIL-2 REQUIREMENTS
- INDIGENOUSLY DESIGNED POWER MANAGEMENT SYSTEM
- MoU BETWEEN NCRTC AND BEL FOR DEVELOPMENT OF PSD SYSTEMS
- FAILSAFE SYSTEM WITH WARM REDUNDANCY TO ACHIEVE 99.99% AVAILABILITY
- HIGH EFFICIENCY (>92%) WITH N+1 REDUNDANT RECTIFIERS

Hon'ble Prime Minister Shri Narendra Modi
travelled in India's first Namo Bharat train

Accessible Design

Expanding on the commitment to a truly comforting and safe passage, Namo Bharat extends its embrace to ensure that its seamless journeys are accessible to absolutely everyone, without exception. In a deeply thoughtful gesture, the design of each train includes a dedicated space specifically tailored to welcome those who might travel with a wheelchair or require the support of a stretcher.

A Space of Assurance

Namo Bharat extends a particularly thoughtful provision, born from a deep understanding of community needs and a commitment to ensuring every traveller feels truly at ease. The vision was to create not just efficient transport, but a truly safe and empowering environment for all. This commitment is beautifully embodied in the dedicated space reserved for women on every train.

This commitment is beautifully embodied in the dedicated space reserved for women on every train and a co-working space reserved for the consummate professional.

WOMEN'S COACH WITH
SEATING CAPACITY OF
72

RESERVED SEATS FOR
WOMEN IN OTHER COACHES
10

नमो भारत
2C|2D

A Sanctuary for Passengers

DYNAMIC ROUTE MAPS

2X2 TRANSVERSE SEATING

WIDE STANDING SPACE

LAPTOP/ MOBILE CHARGING FACILITY

CCTV CAMERAS

HVAC SYSTEM

DOUBLE-GLAZED PANORAMIC WINDOWS

Beyond the swift gateway and protective screens, the true heart of Namo Bharat's design beats for the traveller's innermost experience. This is not merely about reaching a destination quickly; it is about making every moment of the journey a sanctuary of comfort and unwavering safety.

VENDING MACHINE INSIDE COACH

RECLINING SEATS

Building upon the commitment to universal accessibility and comfort for all, Namo Bharat also extends an inviting hand to those accustomed to the privacy and convenience of personal travel. The vision was to offer an experience so refined, so effortless, that even the most discerning traveller would choose the swift embrace of public transit over private vehicles.

प्लेटफॉर्म की ओर
Towards Platform
Happiness Station
Amul
Amul
Amul

1
समय
12:5८

A Web of Connectivity

Having designed individual journeys with unparalleled comfort and care, Namo Bharat extends its embrace beyond its own pathways, recognising that true convenience lies in seamless connections. The vision was to weave a vast tapestry of transit, where every thread leads effortlessly to another, creating an unbroken journey from door to destination. This is the essence of multimodal integration.

NEW ASHOK NAGAR STATION

Pathways of Effortless Flow

The magic of Namo Bharat's design lies in the subtle yet profound details that transform a complex transfer into a seamless experience. It is about eliminating every potential pause, every hesitation. This commitment to effortless movement is brought to life through a thoughtful array with moving walkways, and effortlessly ascending on escalators. Graceful foot overbridges become inviting corridors, whisking you from one mode of transport to another.

GHAZIABAD STATION

“I go faster and come back earlier.

I can give more time to my family now, and I could even join the gym. Thanks to the extra time I have!

“My time will be saved and so will my savings. But most importantly I will be able to spend more time with my family.

PASSENGER'S

“Now I do not have a second thought of going to Delhi. It is a good experience for me.

“Industries will develop and education setup will improve in my city.

“My fuel costs will reduce;

my travel time will reduce and the wear and tear on my vehicle will reduce. If more people use this, then vehicles on the road will reduce and so will pollution.

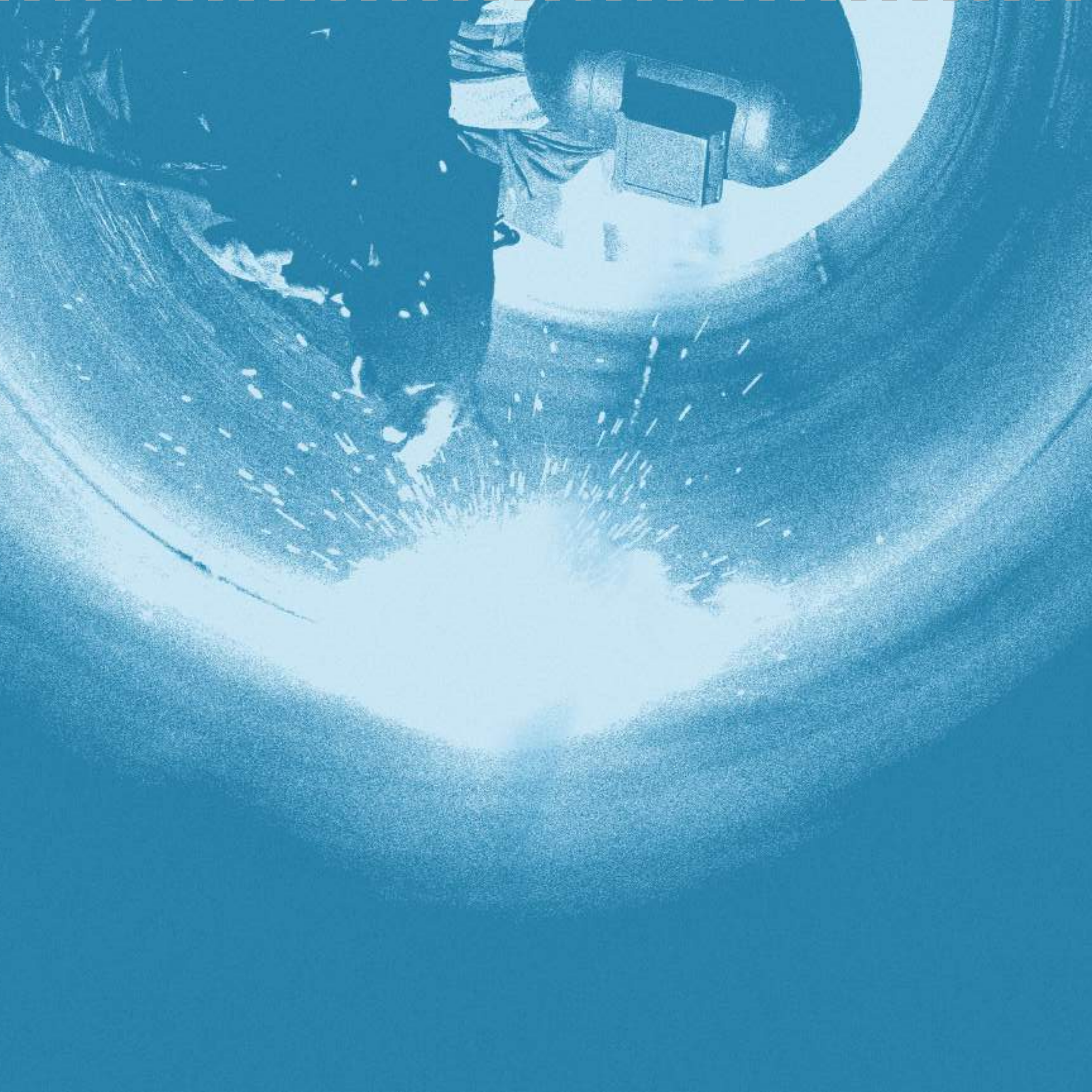
PERSPECTIVE

“With the Namo Bharat, the distance which would take 1.5 hours, now I can do it in 15 minutes.

“It not only saves time,

but my elderly mother can now go back and forth from Meerut at any time, because it is safe and convenient.

THE UNSUNG HEROES

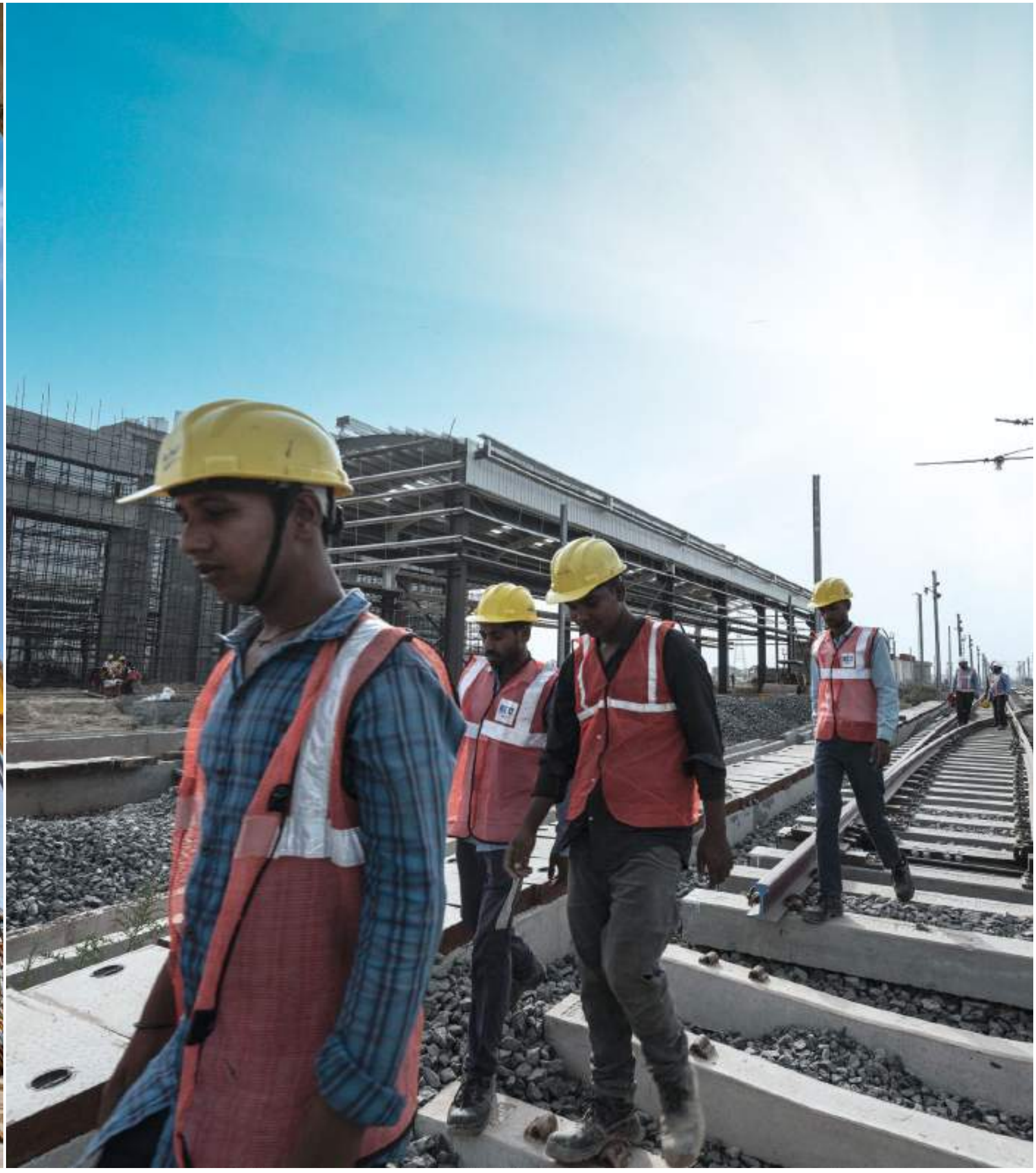


Having celebrated the sophisticated design and seamless experience of Namo Bharat, we acknowledge the foundational strength behind this monumental achievement. The Unsung Heroes—the countless individuals whose dedication, skill, and tireless efforts, often behind the scenes, transformed vision into reality. Here, we honour the engineers, workers, technicians, and every enabler whose commitment formed the bedrock of this transformative project, embodying the spirit of collective accomplishment.

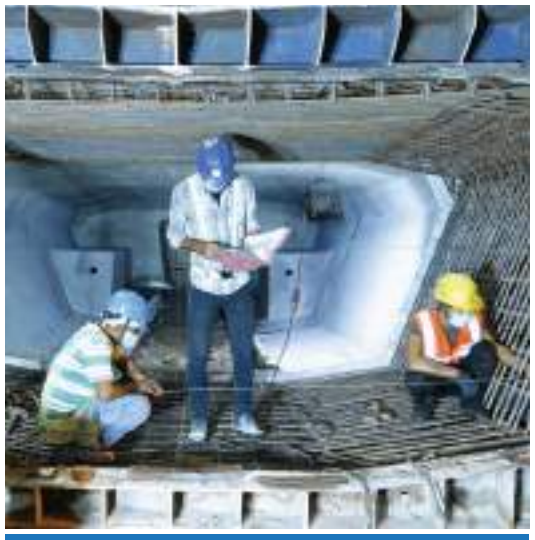
TRACK SLAB FACTORY

ANAND VIHAR STATION

SARAI KALE KHAN STATION SITE



"I work as a supervisor for the steel cutting and welding division. This work is usually done at a significant height above the ground, which is a big challenge.



"After the project is completed, even we will use it. Travelling by bus takes more time and we are always stuck in traffic.

"This is a wonderful project for the country's economic development. I am happy to be a part of it.

"Such a big project for the country brings all of us working on the site a lot of happiness as well.

> One day when I will travel on the Namo Bharat with my family and friends. I will also proudly tell them that I have worked on this project.

> There are a lot of plumbers here like me. We work together as a team to build this dream of the Namo Bharat.

BEGUMPUL STATION

ANAND VIHAR

GULDHAR STATION

SHATABDI NAGAR SITE

UltraTech

MEERUT CENTRAL

MEERUT CENTRAL

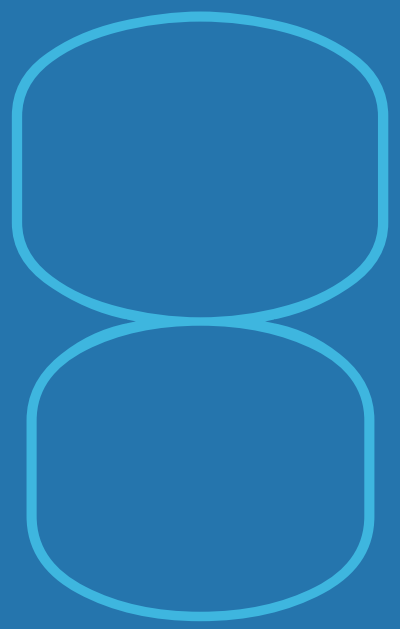
VAISHALI

BEGUMPUL

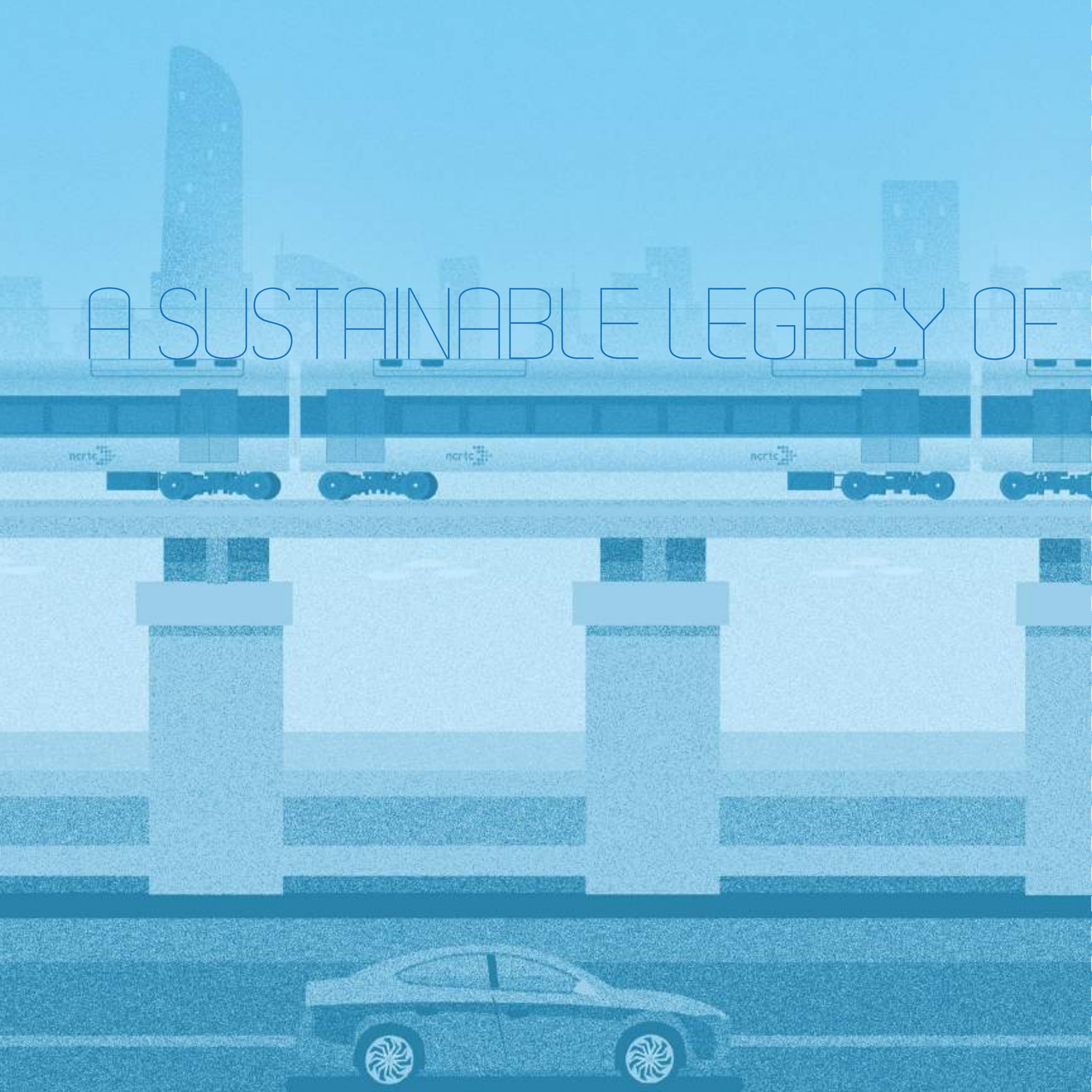
Interacting with heroes

SAFETY
LWAYS

QA QC LAB



A SUSTAINABLE LEGACY OF



TRANSIT

Having honoured the dedicated individuals who built Namo Bharat, we now shift our focus to the profound and lasting impact of this endeavour. Delving into the conscious choices and innovative strategies employed to ensure Namo Bharat is not just a leap in mobility, but also a beacon of environmental responsibility. We explore how it is meticulously designed to foster a greener future, significantly reducing its ecological footprint and contributing to a healthier, more sustainable urban landscape.

The Clean Current

The most fundamental and powerful choice lies in the energy that propels it forward. At the heart of this sustainable vision is a deliberate departure from traditional, fossil-fuel-dependent locomotion towards a cleaner, more harmonious mode of movement.

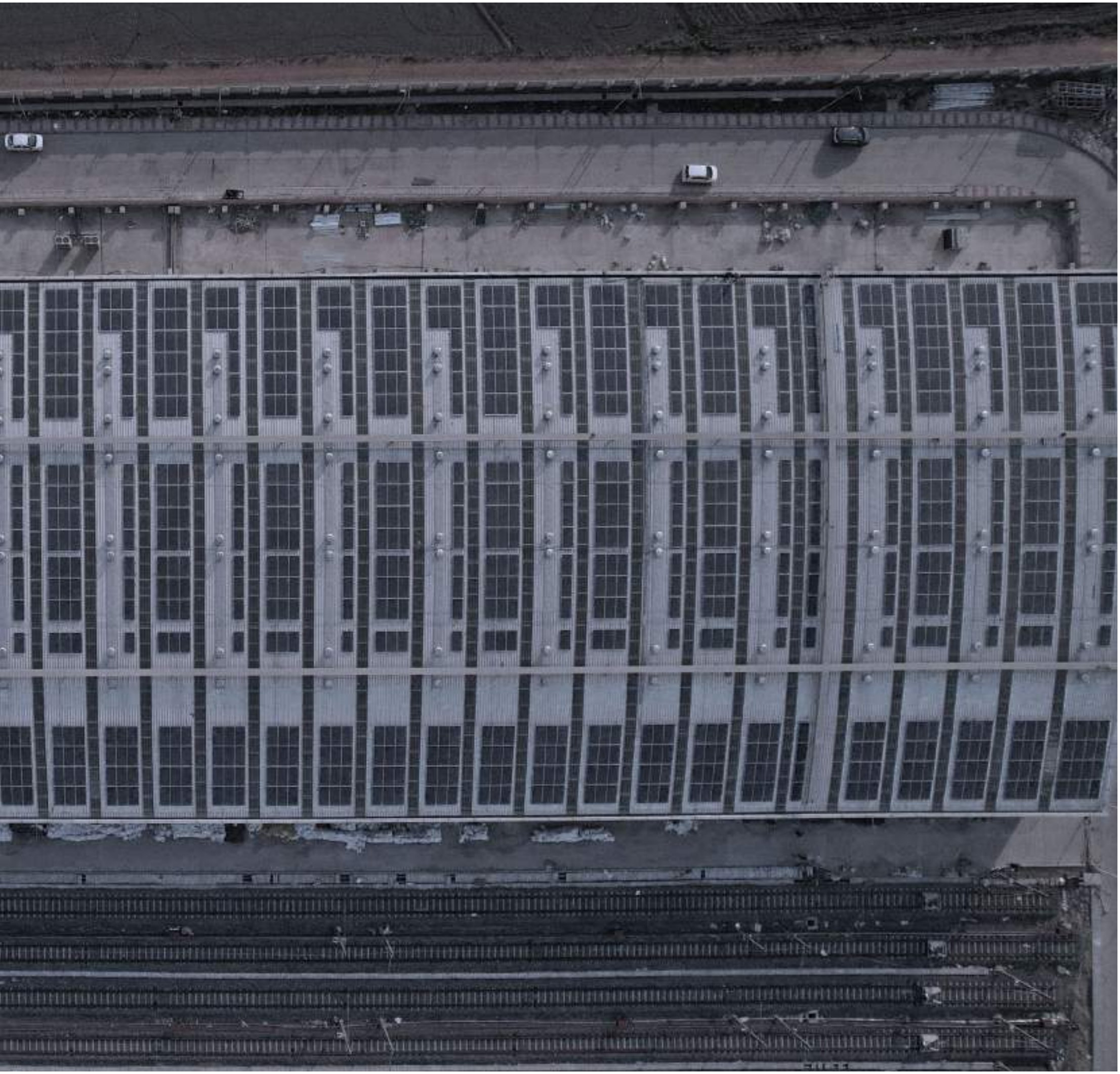
This pivotal decision is embodied in the adoption of electric traction. This means zero emissions at the point of travel, ensuring that the air breathed in our cities remains cleaner and clearer. It represents a conscious commitment to reducing the environmental footprint of regional commuting, fostering healthier communities and a more vibrant ecosystem.

DUHAI DEPOT

Solar Charged Future

Namo Bharat's commitment to sustainability goes beyond merely reducing emissions, the vision extends to actively harnessing the planet's most abundant, clean resource.

This deep dedication is manifest in the widespread integration of solar power.



MEERUT SOUTH STATION

The stations and maintenance depots, silently transforming those sunrays into the energy that breathes life into the system. It is a powerful statement, a conscious effort to minimise reliance on conventional power sources, ensuring that 60% of the network's operational needs are met through pure, renewable energy. An achievement by strategically installing solar panels on all elevated stations and depots, resulting in most of the auxiliary power requirement being met by solar energy.

DUHAI DEPOT

Increased Usage of Public Transport

DUHAI SITE

This new mode of transit aspires to change our collective habits, inspire a monumental shift, it is an invitation to individuals to embrace a shared, harmonious way of moving.

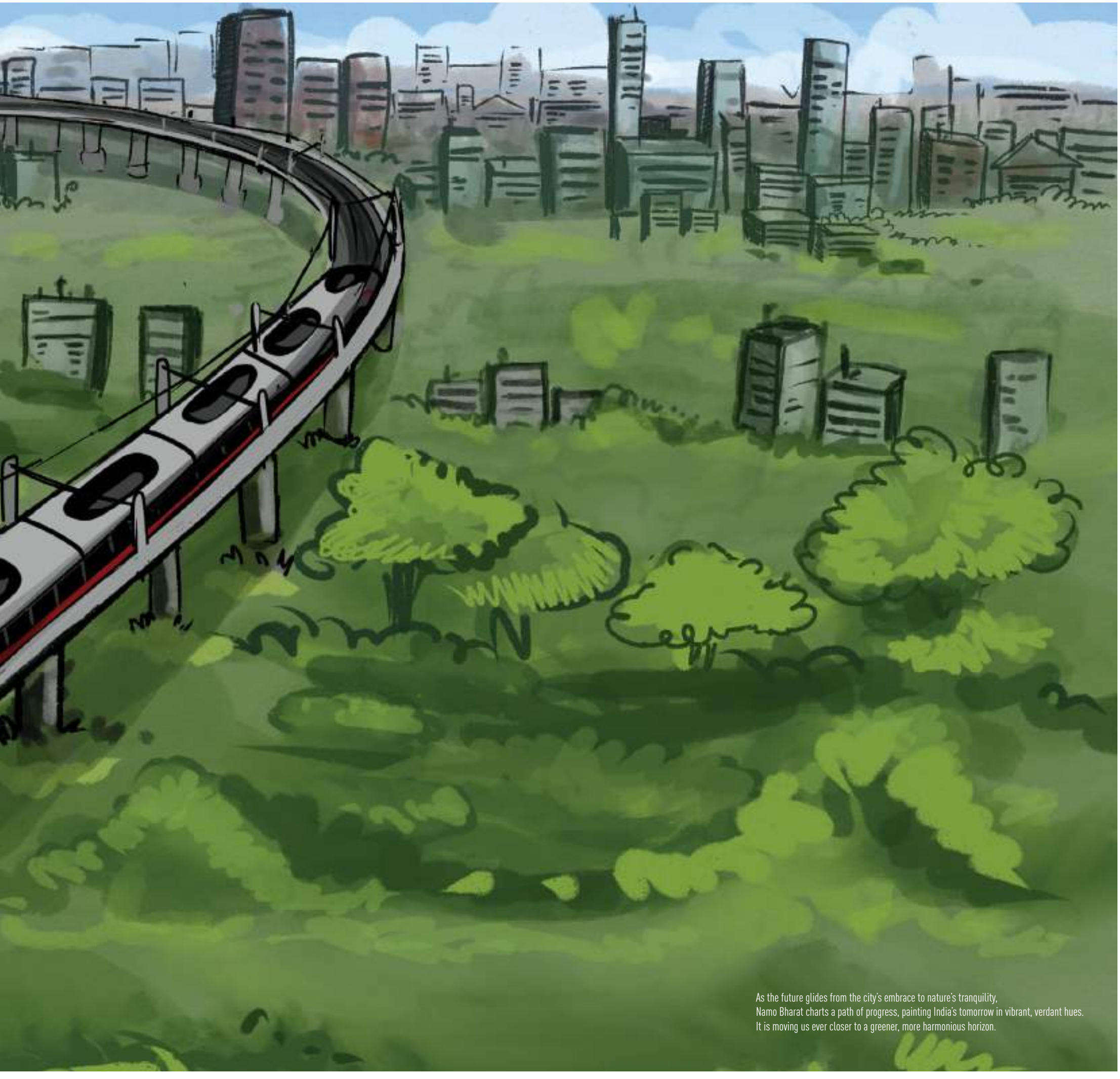
The essence of Namo Bharat's design, from its initial conception, has been to cultivate this change. Through meticulous planning, its stations are lovingly woven into the fabric of existing transport networks – bus hubs, metro lines, and railway stations – creating a seamless web of connectivity. By making public transport truly effortless, it encourages a societal pivot away from individual vehicles, fostering a future where 63% of the community uses public transport. A massive increase from the current 37%.

SARAI KALE KHAN STATION

Top to Bottom: Automatic Tyre Wash System; Dust Suppression by Water Spraying Machine; Road Sweeping Machines at Work

Tree Transplantation

ANAND VIHAR SITE



As the future glides from the city's embrace to nature's tranquility,
Namo Bharat charts a path of progress, painting India's tomorrow in vibrant, verdant hues.
It is moving us ever closer to a greener, more harmonious horizon.

A Breath of Fresh Air

MEERUT SOUTH STATION

Namo Bharat's most exquisite sustainable impact emerges from a broader transformation: a quiet revolution on our roadways and in the air we breathe. It is about shifting the rhythm of regional travel, moving away from individual journeys that strain our environment.

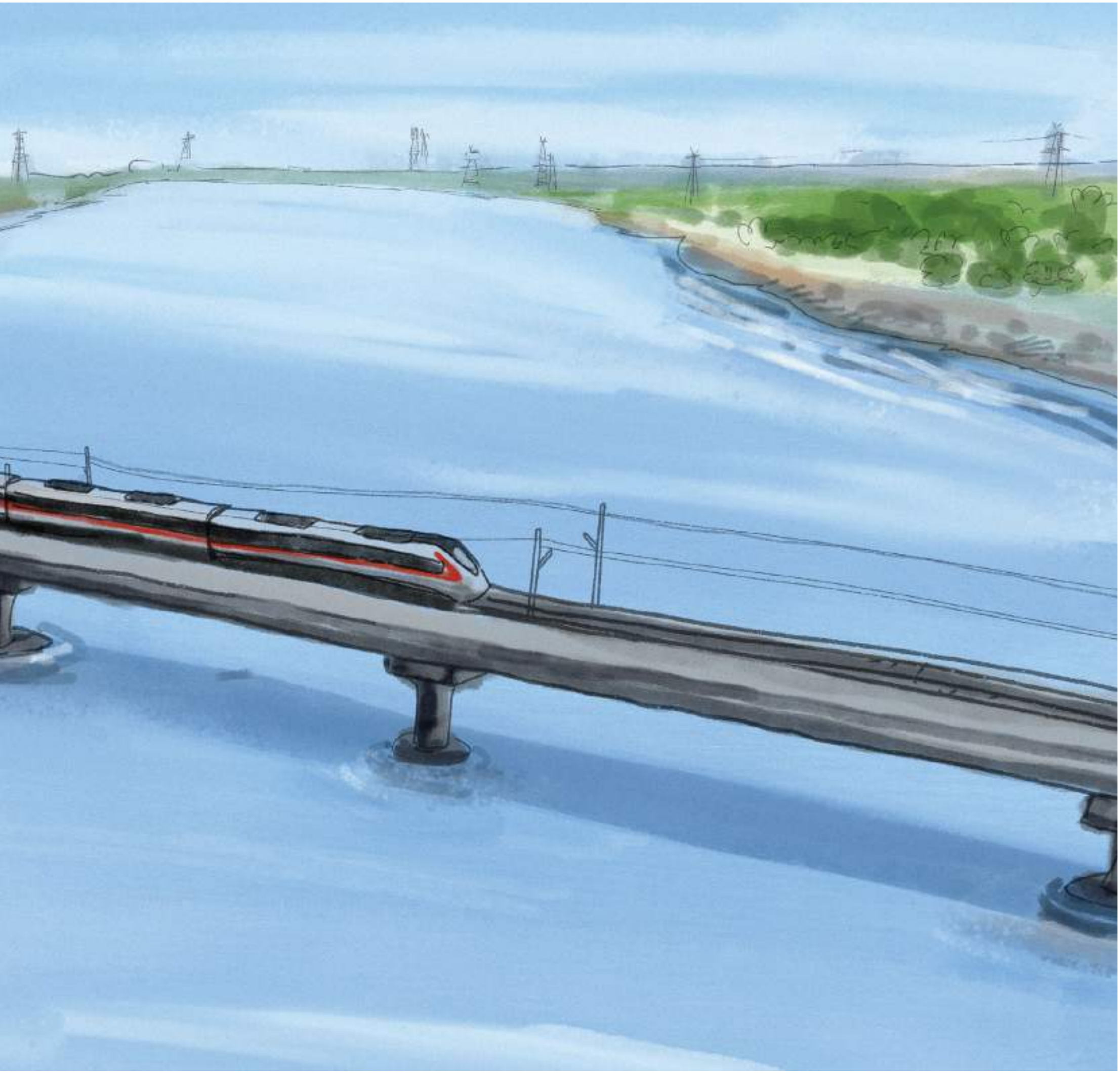
A future where thousands of private vehicles step aside, their daily presence on the roads significantly lessened. This is the promise of Namo Bharat's embrace: a tangible reduction in the unseen plumes that contribute to air pollution. An estimated 1 lakh private vehicles will be reduced from the road, reducing CO_2 emissions by an incredible 250,000 tonnes, annually.

Push-Button Doors

Sustainability is woven into the subtle, everyday interactions within the system. Thoughtful details contribute to a more energy-conscious operation, showcasing how even the smallest design choices can make a significant environmental difference. Instead of every door swinging open at every stop, a more refined approach has been adopted: push-button doors for selective opening. This simple yet profound innovation conserves energy.

GHAZIABAD SITE

A beacon of hope and aspiration of society that strives to live in a cleaner tomorrow.
The Namo Bharat is not a step, but a giant leap in the direction of inhabiting a world with clear blue skies and rivers.



YAMUNA BRIDGE

UPCOMING NAMO BHARAT
PRIORITY CORRIDOR - PHASE 1

DELHI ALWAR CORRIDOR

2025 ONWARDS ----- LENGTH 196 KM ----- 22 MAIN LINE STATIONS

DELHI

SARAI KALE KHAN

INA

MUNIRKA

AEROCITY

CYBER CITY

IFFCO CHOWK

RAJIV CHOWK

HERO HONDA CHOWK

KHERKI DAULA

MANESAR

PANCHGAON

BILASPUR CHOWK

DHARUHERA

(FUTURE STATION) MBIR

REWARI (FUTURE STATION)

BAWAL

HARYANA

SNB

SHAHJAHANPUR

NEEMRANA

BEHROR

SOTANALA

KHAIRTHAL

RAJASTHAN

ALWAR

ALWAR

STAGE 1

STAGE 2

STAGE 3

UPCOMING NAMO BHARAT
PRIORITY CORRIDOR - PHASE 1

DELHI KARNAL CORRIDOR

2025 ONWARDS ----- LENGTH 136 KM ----- 17 MAIN LINE STATIONS

KARNAL NEW ISBT
KARNAL SECTOR 7
KARNAL BY-PASS
GHARAUNDA
GANJBAR
(FUTURE STATION) PANIPAT SECTOR 18
PANIPAT
PANIPAT ISBT SEWAH
SAMALKHA
GANNAUR
(FUTURE STATION) BARHI
MURTHAL
BAHALGARH
(FUTURE STATION) KMP
KUNDLI / NATHUPURA
NARELA
ALIPUR
BHALSWA CHOWK
JHARODA MAJRA
KASHMERE GATE
INDRAPRASTHA
SARAI KALE KHAN

KARNAL
DELHI
HARYANA
UTTAR PRADESH

STAGE 1
STAGE 2

What began as blueprints and bold beliefs
now glides through our cities and lives.
Quietly transforming the everyday
into the extraordinary.

Namo Bharat is more than a symbol of what we have built,
but also a vision of what lies ahead.
A future driven by connection and compassion,
for our collective progress.

As we step off this ride, we carry memories,
we carry momentum.
Because the tracks may end here, but
the journey to a New India has just begun.

Step In. The Future Has Arrived serves as a comprehensive record of the Namo Bharat project, a landmark achievement in India's transportation history. Through its pages, readers will gain insight into the innovative design and advanced technology that define this system.

The book presents a compelling case for the project's long-term impact, highlighting its role in enhancing urban connectivity and establishing a new paradigm for sustainable and progressive regional development.

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