



MILAN SUBWAY

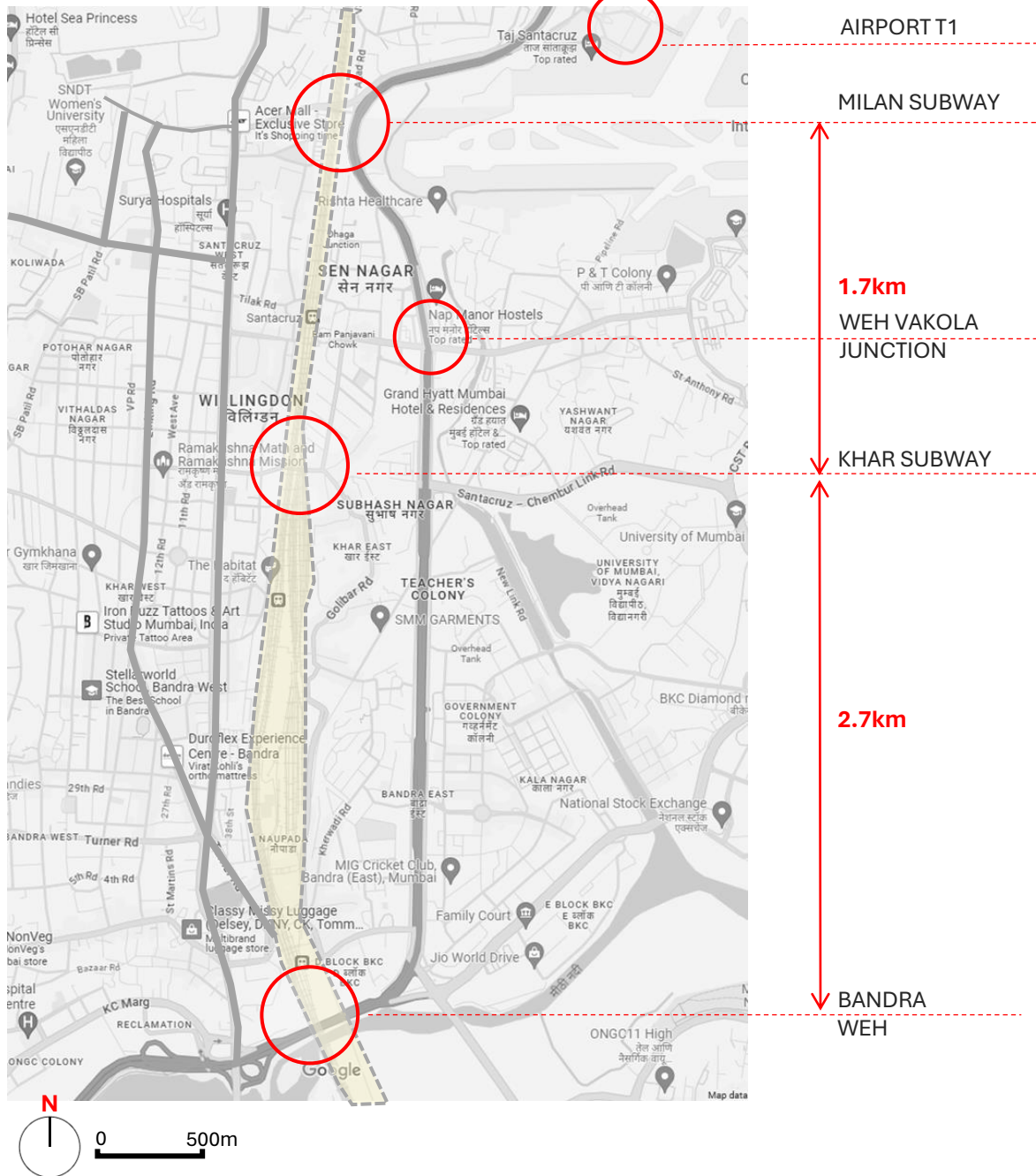
KHAR SUBWAY

BANDRA
WEH

Rethinking Traffic Solutions: A Case against the proposed Khar-Santa Cruz Elevated Road

DESIGN ANALYSIS
of the BMC proposal
**and potentially better &
more sustainable
alternatives**

APRIL 2024



A City Divided

North-South City

Mumbai is **DIVIDED** into West & East by the RAILWAY which runs North to South.

East-West Crossings

There are only **3 E-W crossings** between Santa Cruz to Bandra:

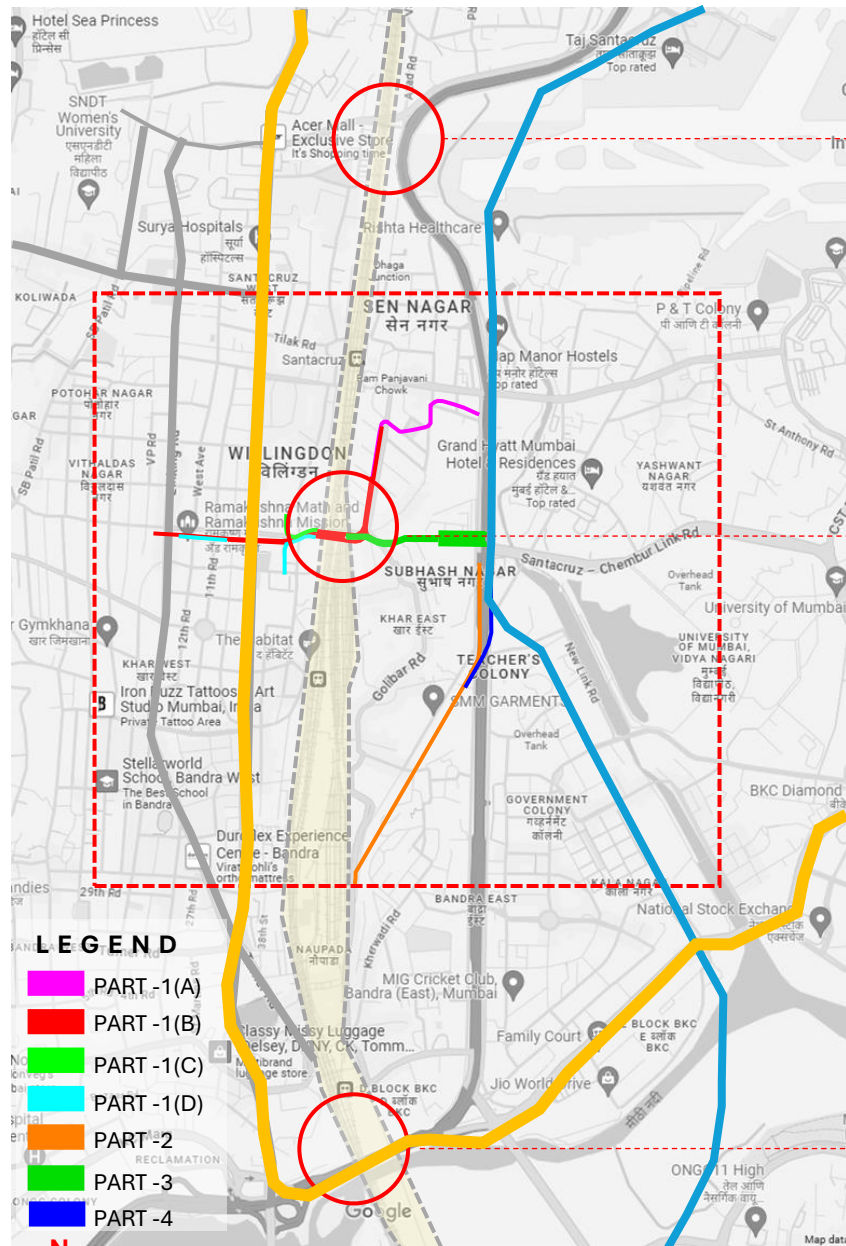
1. Milan Subway & Flyover
2. Khar Subway
3. Bandra Western Exp. Highway

Issues

The lack of East-West connectivity leads to heavy traffic at these 3 intersections, creating bottlenecks.

Solutions

Prioritize urban design solutions that promote sustainable mobility while enhancing public spaces and preserving neighborhood character.



MILAN SUBWAY

1.7km

KHAR SUBWAY

2.7km

BANDRA
WEH

The BMC “solution” Khar-Santa Cruz Elevated Road

BMC plans to build an elevated road here.

In an effort to reduce congestion, the BMC has planned an elevated road here. Unfortunately, this would lead to the destruction of urban fabric, increased traffic, chaos, and pollution.

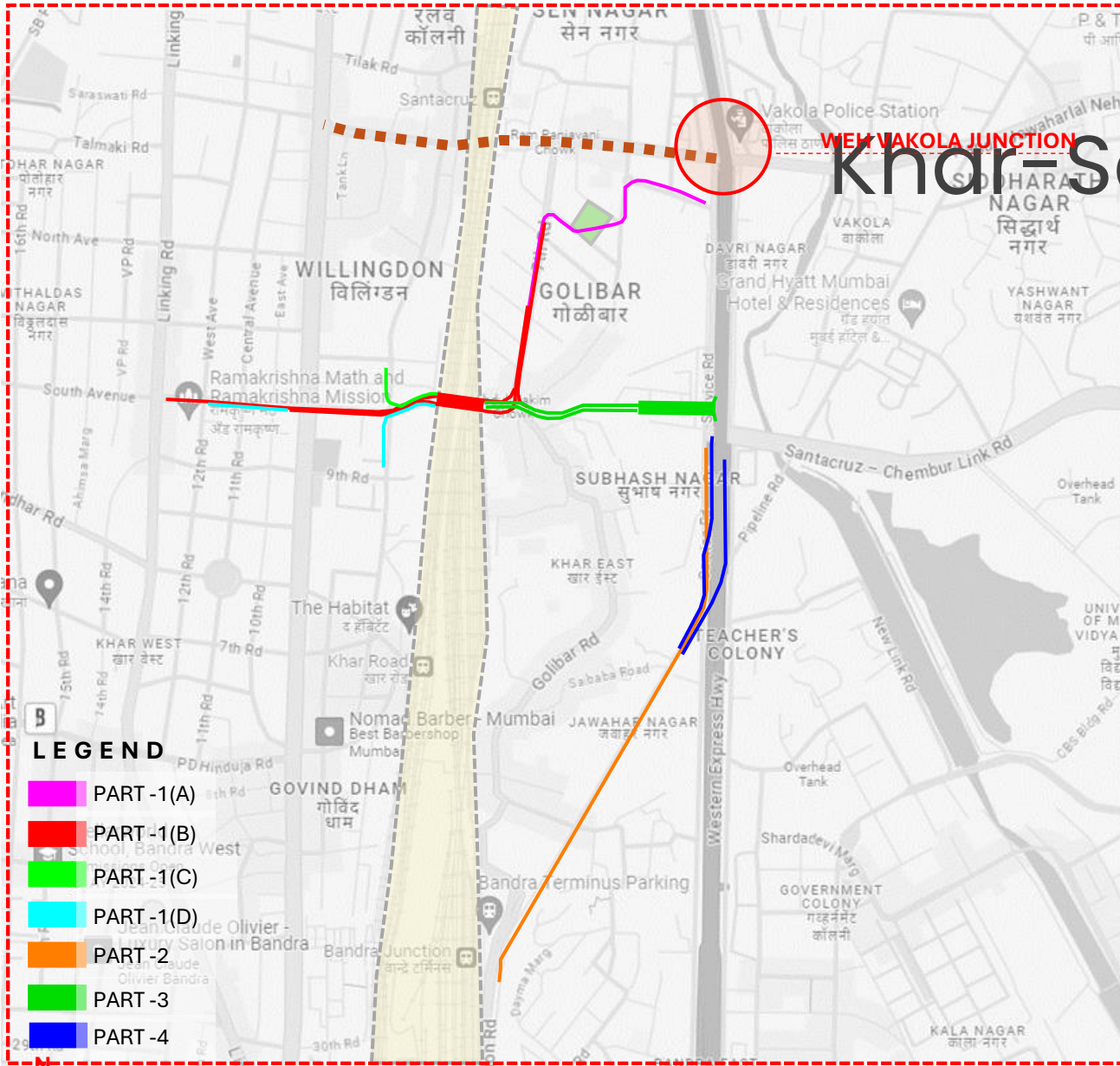
The existing roads and the Khar subway cater to pedestrians and cyclists, making transportation options more inclusive. The limited accessibility of overpasses primarily serve vehicles.

Drawbacks of Flyovers

Flyovers and elevated roads may exacerbate existing traffic issues and have negative environmental impacts.

Overpasses negatively impact the air quality, light, and tree cover. In contrast the widening the subway has minimal environmental disruption while preserving the urban fabric.

Issues with Proposed Khar-Santa Cruz Elevated Road



Costly Project

The staggering **2,400 crores** budget raises concerns about prioritizing public funds for private 4-wheeler traffic only.

Missing Development Plan Roads

The existing Development Plan includes several roads yet to be constructed, warranting attention over costly overpasses.

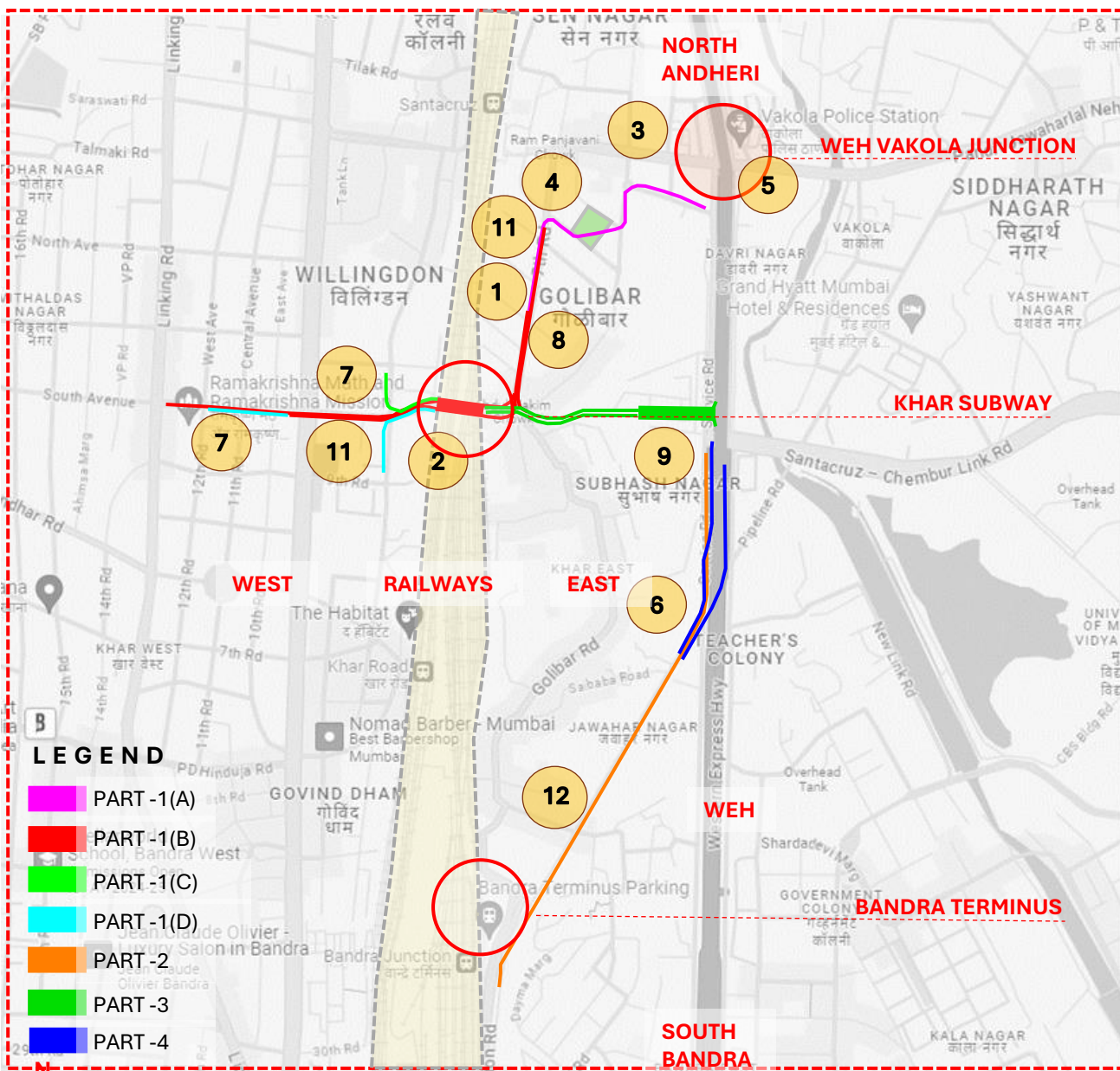
Need for Sustainable Urban Design

This highlights the importance of sustainable urban design in addressing such issues. It calls for a strategic and eco-friendly approach to urban development, focusing on long-term benefits and community well-being.

Single point overload

Concentrating the traffic at a single node will only exacerbate existing traffic issues and have negative environmental impacts.

Design analysis



The existing road underneath the elevated road will be severely compromised by the piers and being narrow will be effectively useless.

It would be cheaper, faster, easier and more effective to widen the existing Khar subway. The existing “subway” is a road at the same level as SV road and Linking Road.

It's mainly a North-bound connector at the WEH, creating the same issues as the badly designed Milan flyover.

The elevated road (Part 1-A) has some very sharp turns and the road dissects a public garden!!!

The elevated road (Part 1-A) lands at the highway on 10th road BEFORE the main highway Vakola signal! This totally negates any advantage gained.

Pipeline road (Part 2) is needlessly elevated. By pushing traffic onto WEH (N-S only) we also lose the easily obvious East-West connectivity by just following the pipeline road to Vakola.

Because of the excessive elevation due to the railway crossing, there will be long ramps necessitated and the roads will be further compromised. (Ref: Gokhale Bridge)

Further, the elevated road would need a lot of trees to be cut while also compromising the air, light and ventilation at street level.

The connector marked Green (Part 3) is required and could well be at grade (not elevated).

Overall, this entire road is designed for speeds of 20-30kmph, it's very narrow with sharp turns and this elevated road is very poorly designed. A total waste.

The residents along this road completely lose their privacy, view and peace, only for a few cars to go faster.

The entire Khar East - Bandra terminus area can definitely be better designed (currently slums) to accommodate roads at grade.

Urban Design and Community Well-being

Importance of Urban Design

Prioritize solutions that enhance public spaces, preserve neighborhood character, and promote sustainable mobility. Expanding the subway not only maintains the aesthetic appeal of the neighbourhood but also preserves residents' peace and privacy.

Inclusive Accessibility

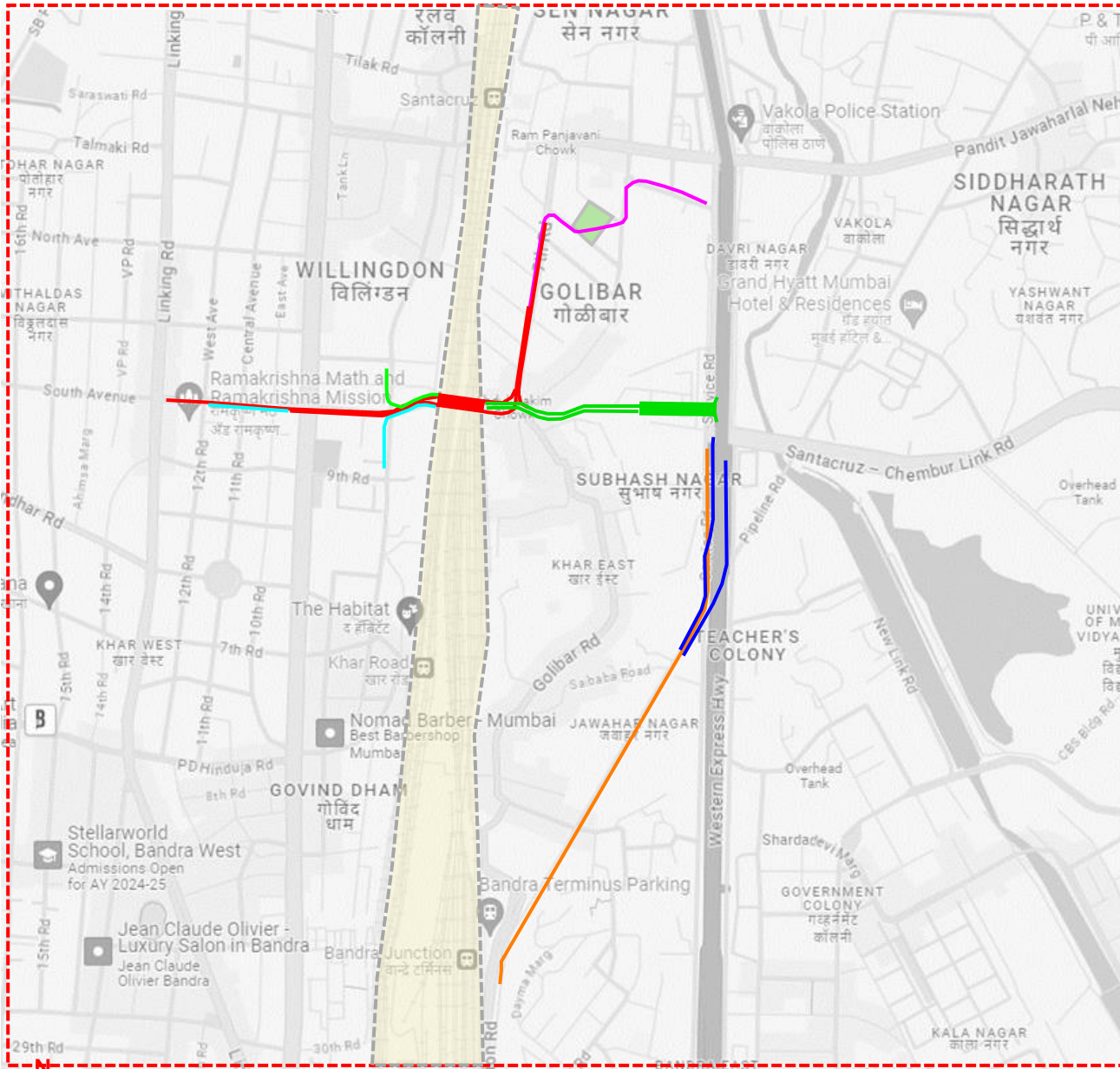
Unlike elevated roads, the existing subway and roads cater to all, promoting inclusive transportation options for pedestrians and cyclists.

Integration with Development Plan

Addressing missing DP roads should take precedence over constructing new overground structures, ensuring a comprehensive approach to long-term traffic management.

Environmental considerations

Widening the subway minimizes environmental disruption by avoiding tree cutting and preserving natural light and airflow.



Existing Infrastructure

Cost & Time Efficiency

The existing infrastructure of the Khar subway presents a pragmatic solution, eliminating the need for constructing new structures and minimizing the overall implementation costs.

Pragmatic Alternative

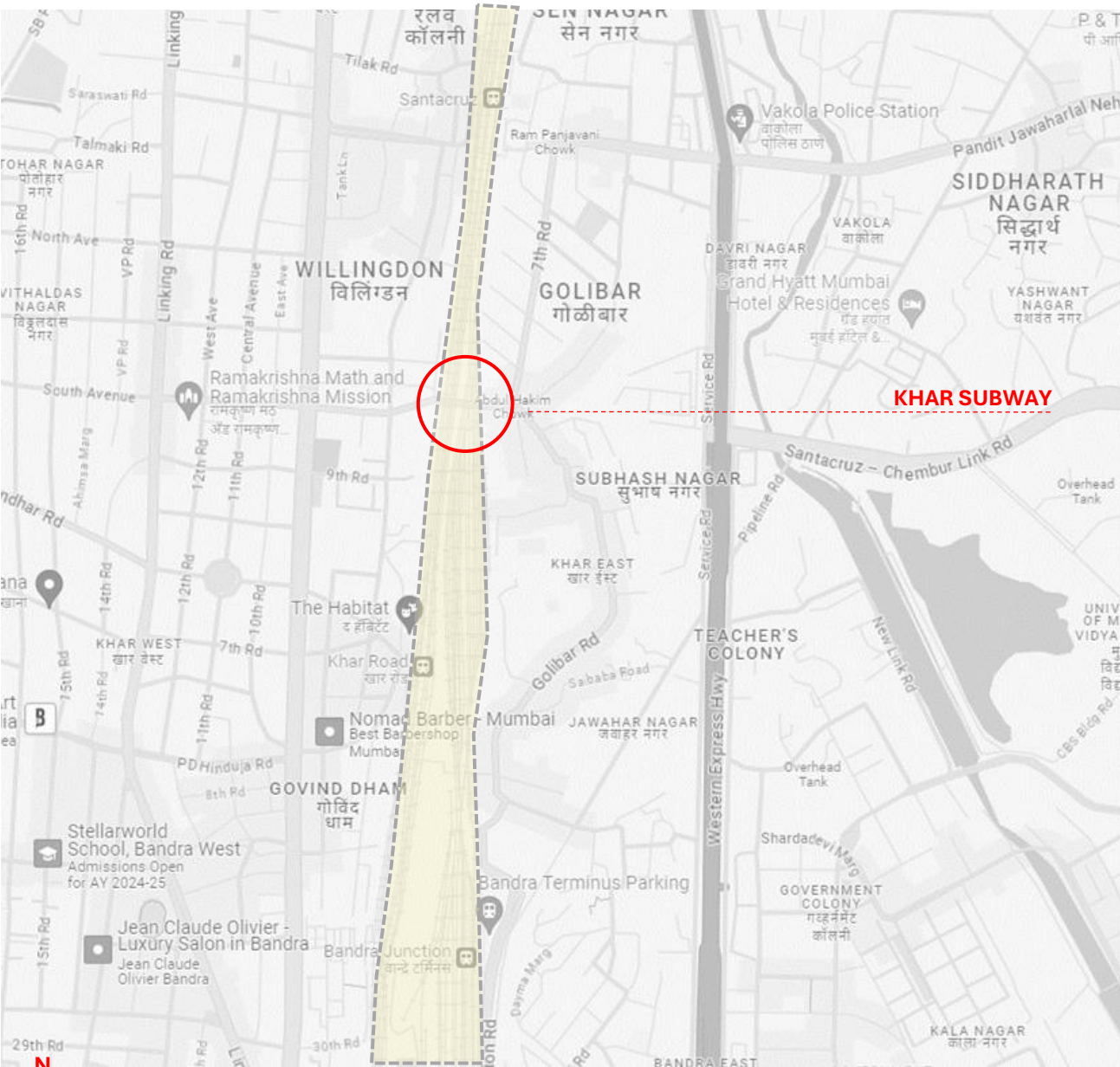
Khar “Subway” is a misnomer because it is a road at the same level as S.V. Road and the surrounding areas.

Flooding & Solution

Although at ground level, Khar “Subway” floods. A simple solution is redirecting the water from the elevated railway into drains rather than onto the road. This would be more efficient than ignoring the problem and constructing an expensive, new elevated road.

Community-Centred Design

The subway expansion aligns with the community's needs, offering inclusive accessibility and integration with urban development plans, reflecting a people-centered approach to transportation and infrastructure.



Smarter Traffic Solutions

Distributing Traffic

Instead of concentrating traffic on a single elevated road, Mumbai should explore alternative solutions that distribute traffic through multiple routes. Instant decongestion.

Viable Alternatives

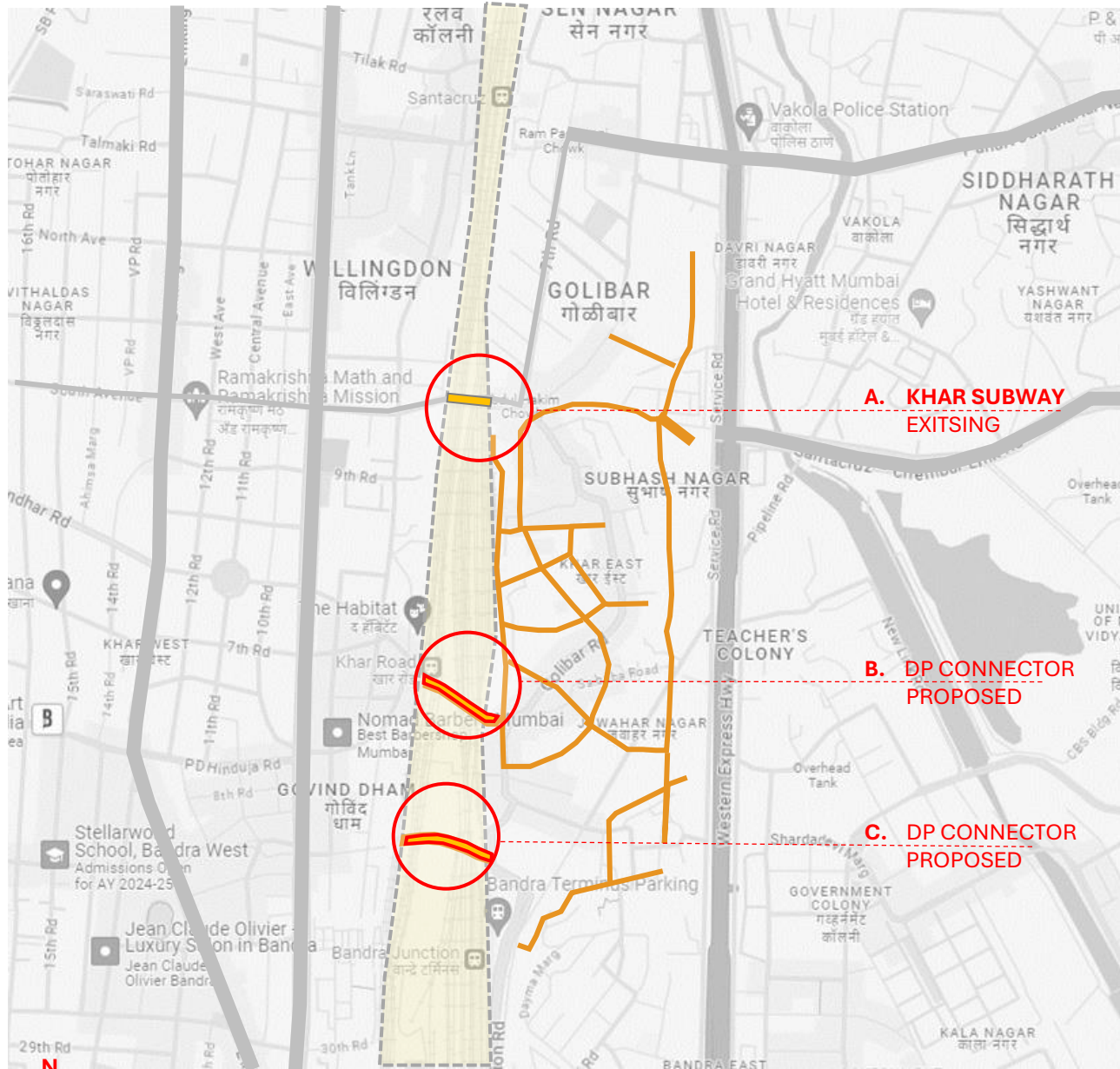
Investing in basic infrastructure, improving public transportation, and promoting non-motorized modes of travel can provide viable alternatives to alleviate congestion.

Development Plan Integration

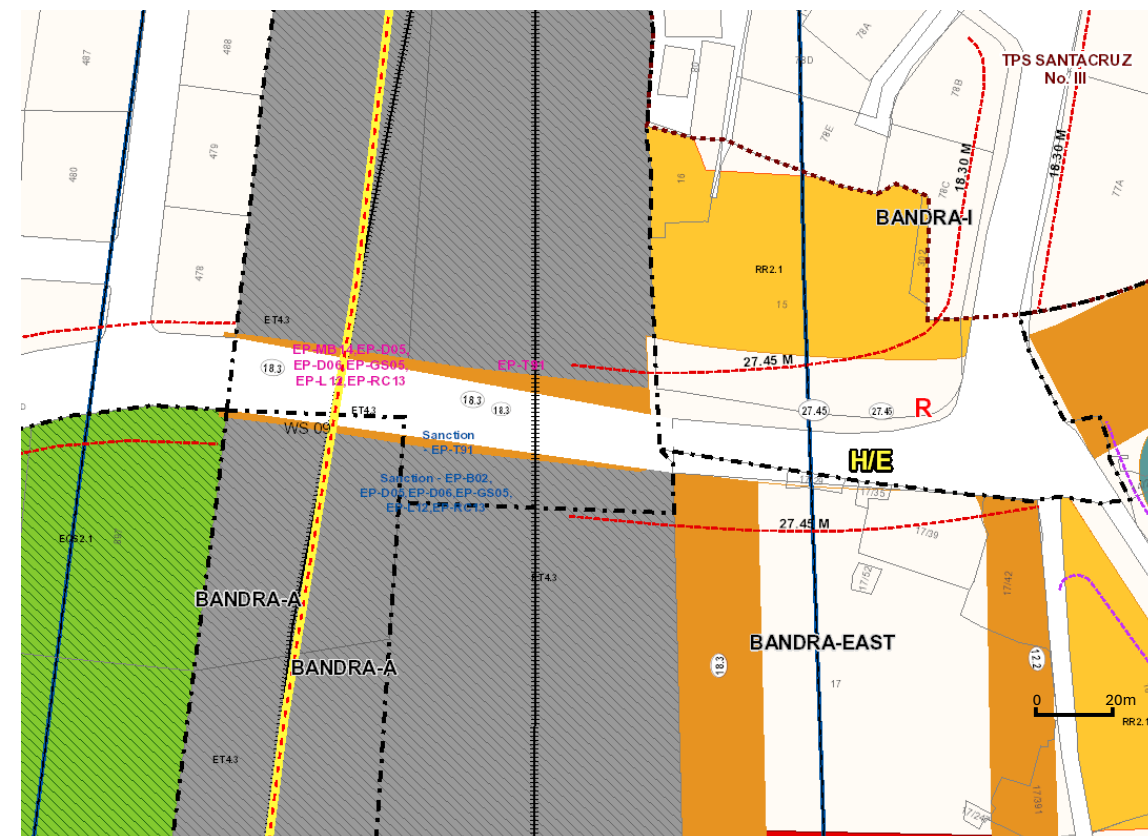
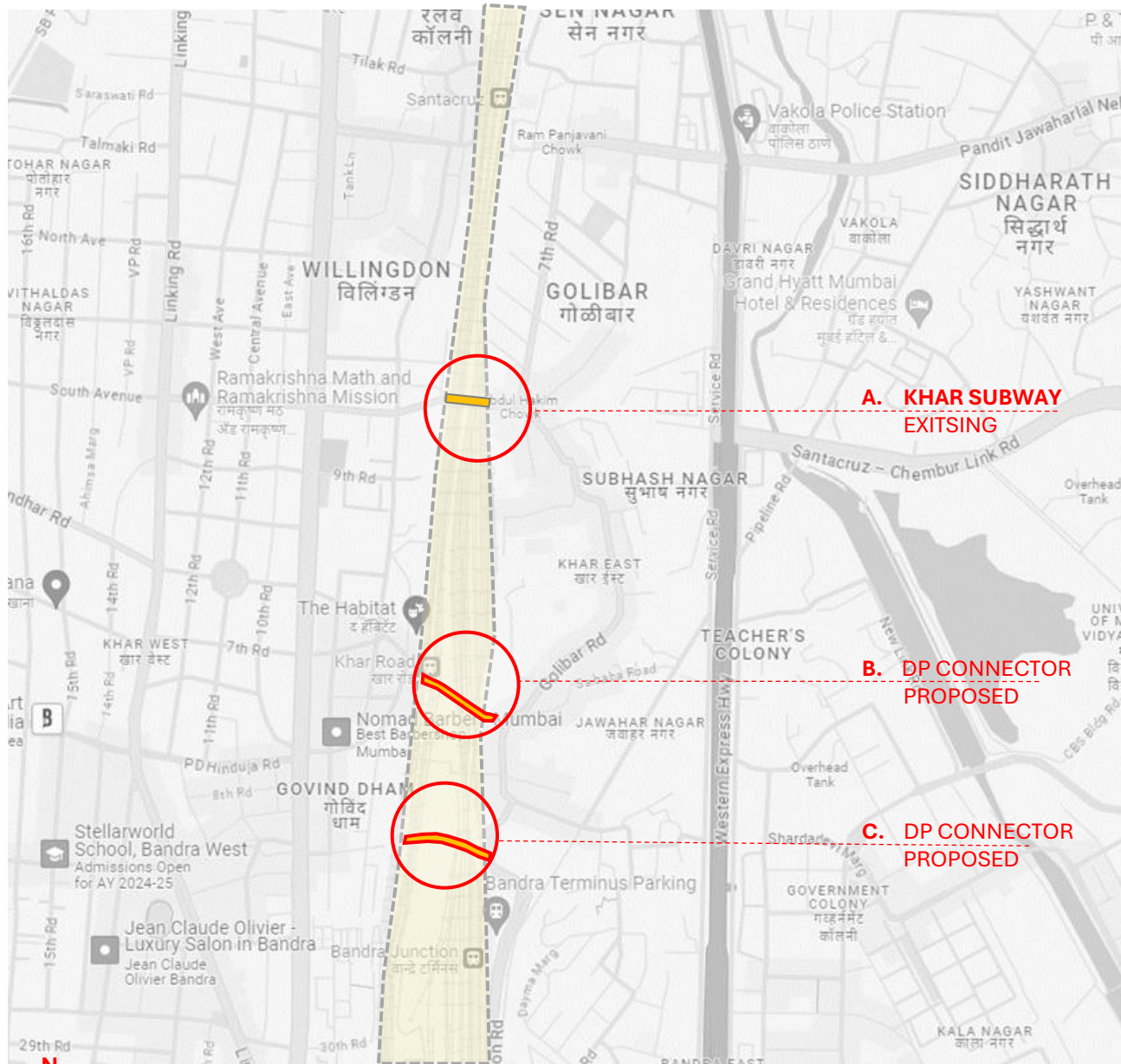
Addressing missing Development Plan roads yet to be constructed underscores the necessity of a comprehensive approach to long-term traffic management, integrating infrastructure improvements with urban development frameworks.

Innovative & Sustainable Solutions

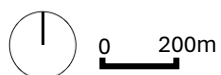
Focus on prioritizing public transportation, pedestrian-friendly infrastructure, and inclusive smart urban planning instead of investing in expensive overpasses



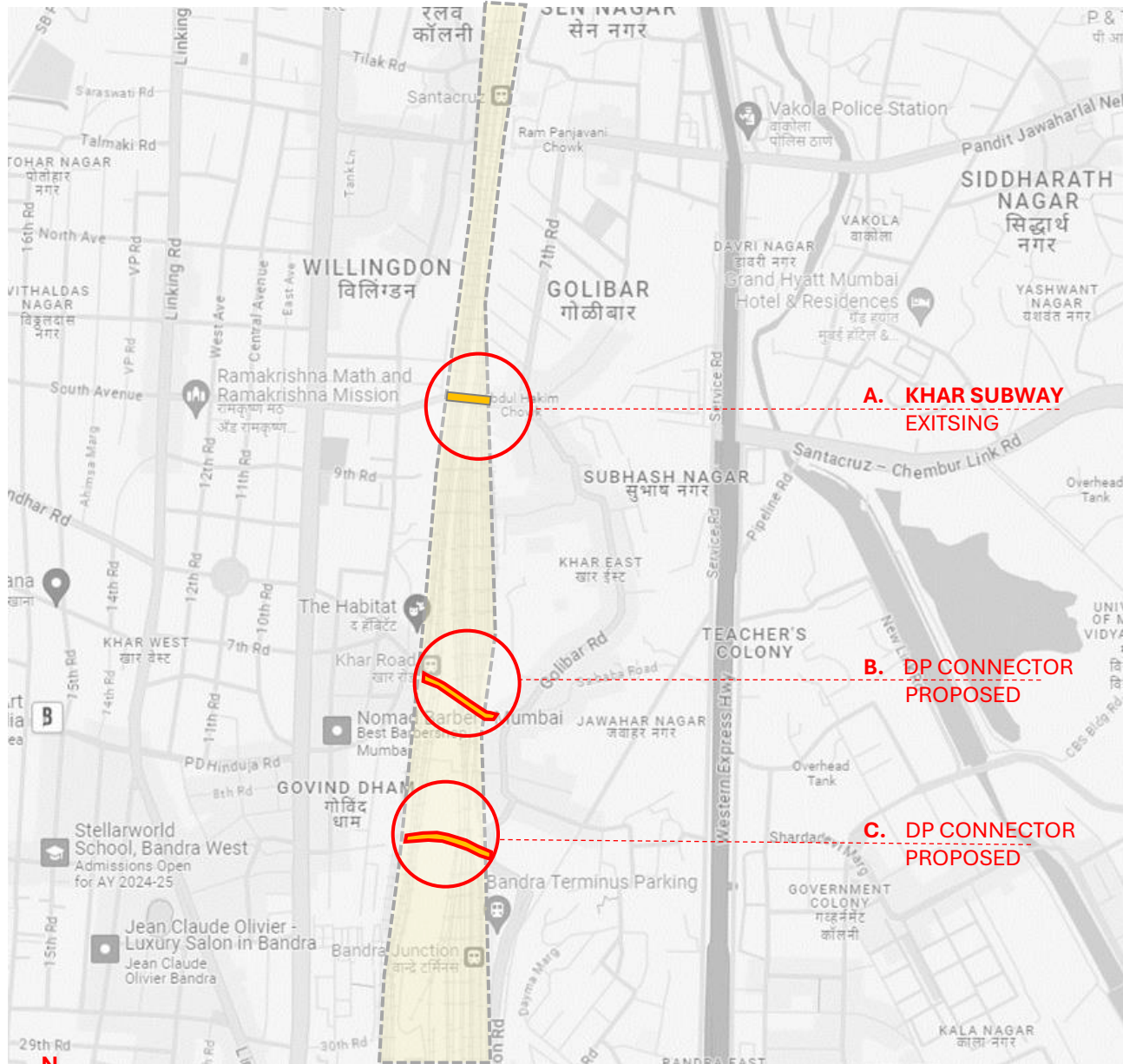
Connectors



A. KHAR SUBWAY: EXISTING

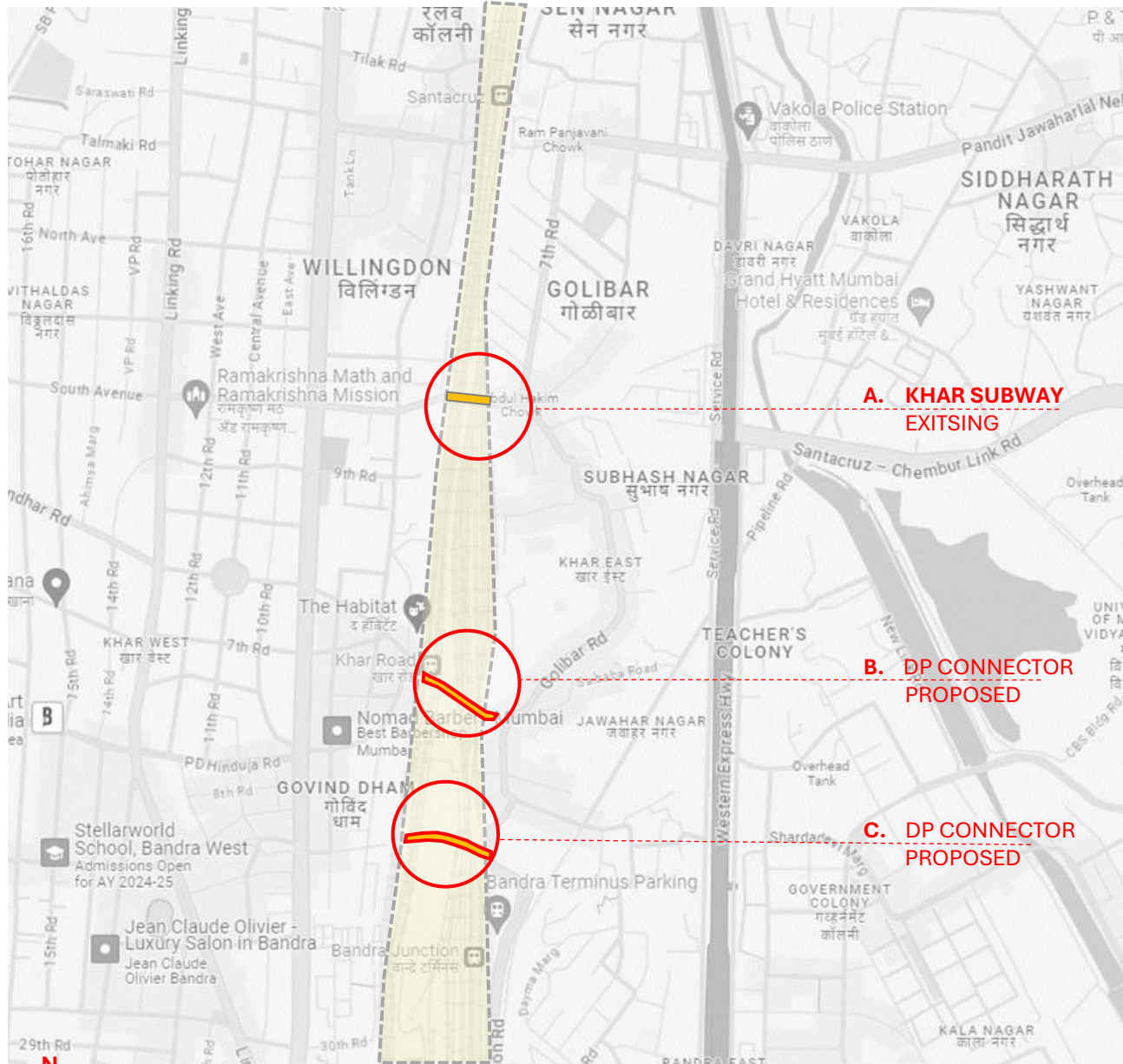


Connectors



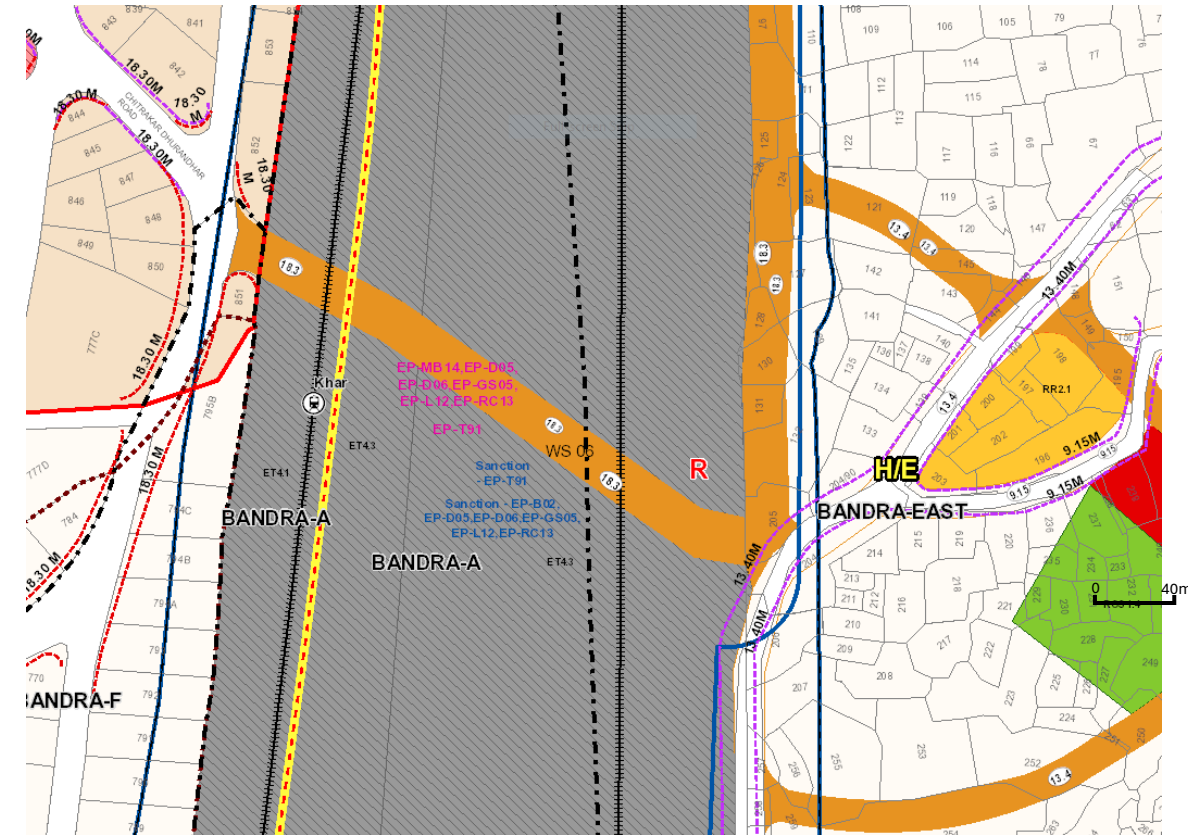
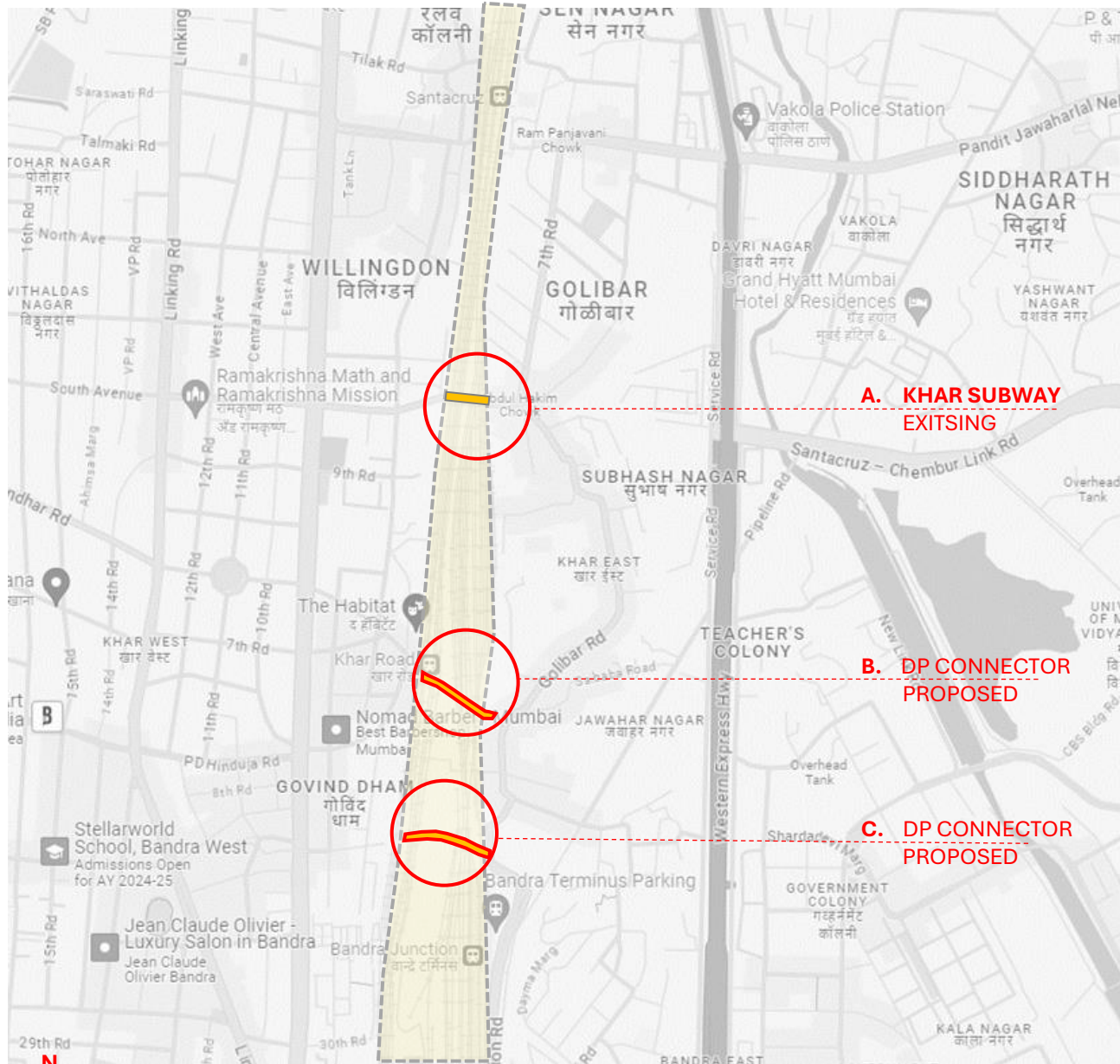
A. KHAR SUBWAY (WEST): EXISTING

Connectors



A. KHAR SUBWAY (EAST): EXISTING

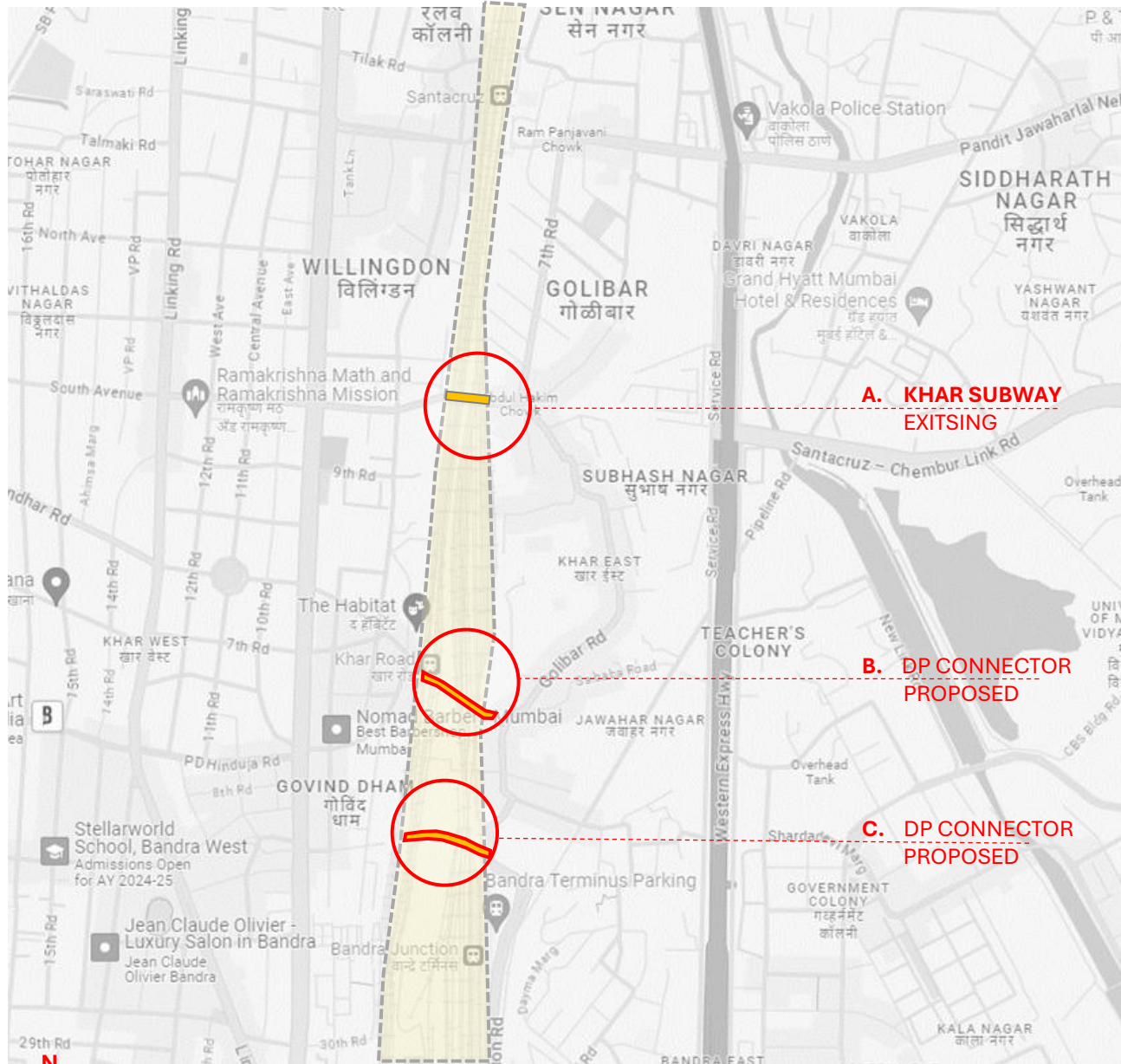
Connectors



B. DP ROAD PROPOSED: EXISTING

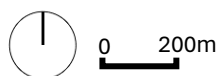
Implementing this DP Road at Khar would automatically decongest the existing Khar subway and its environs

Connectors

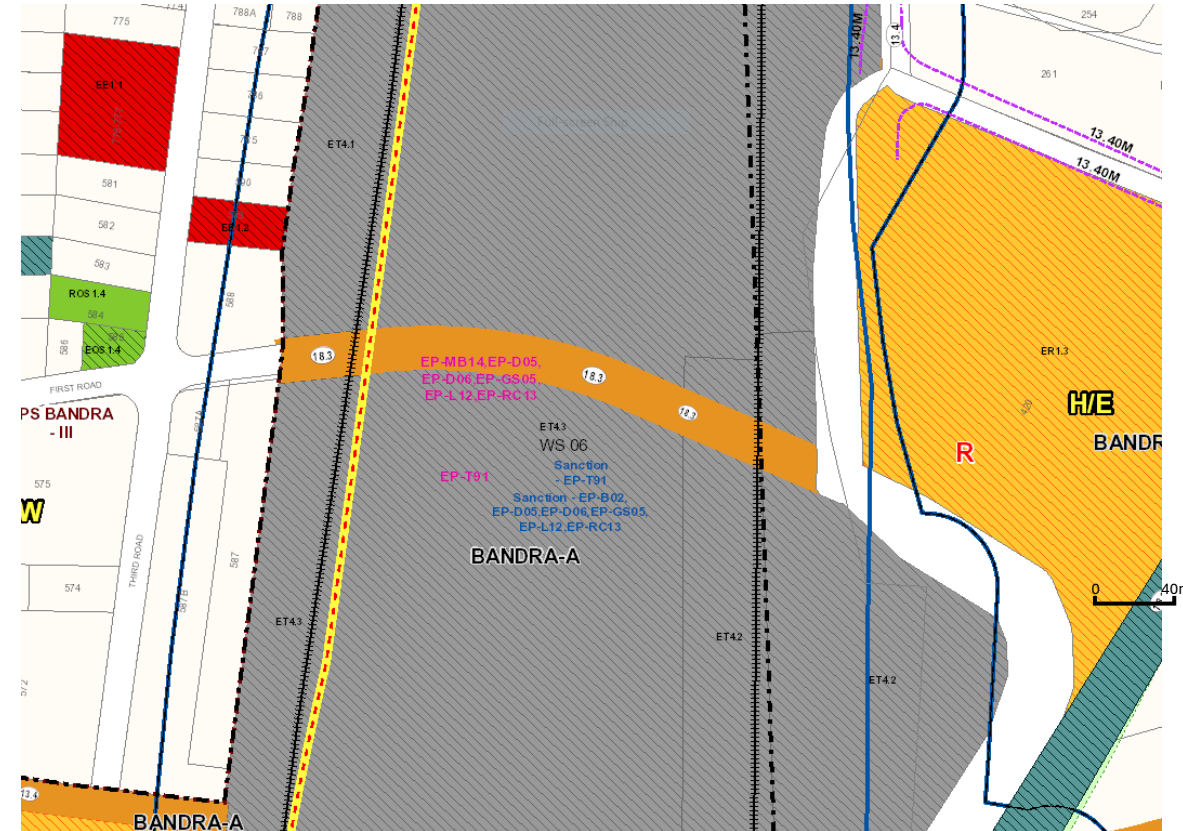
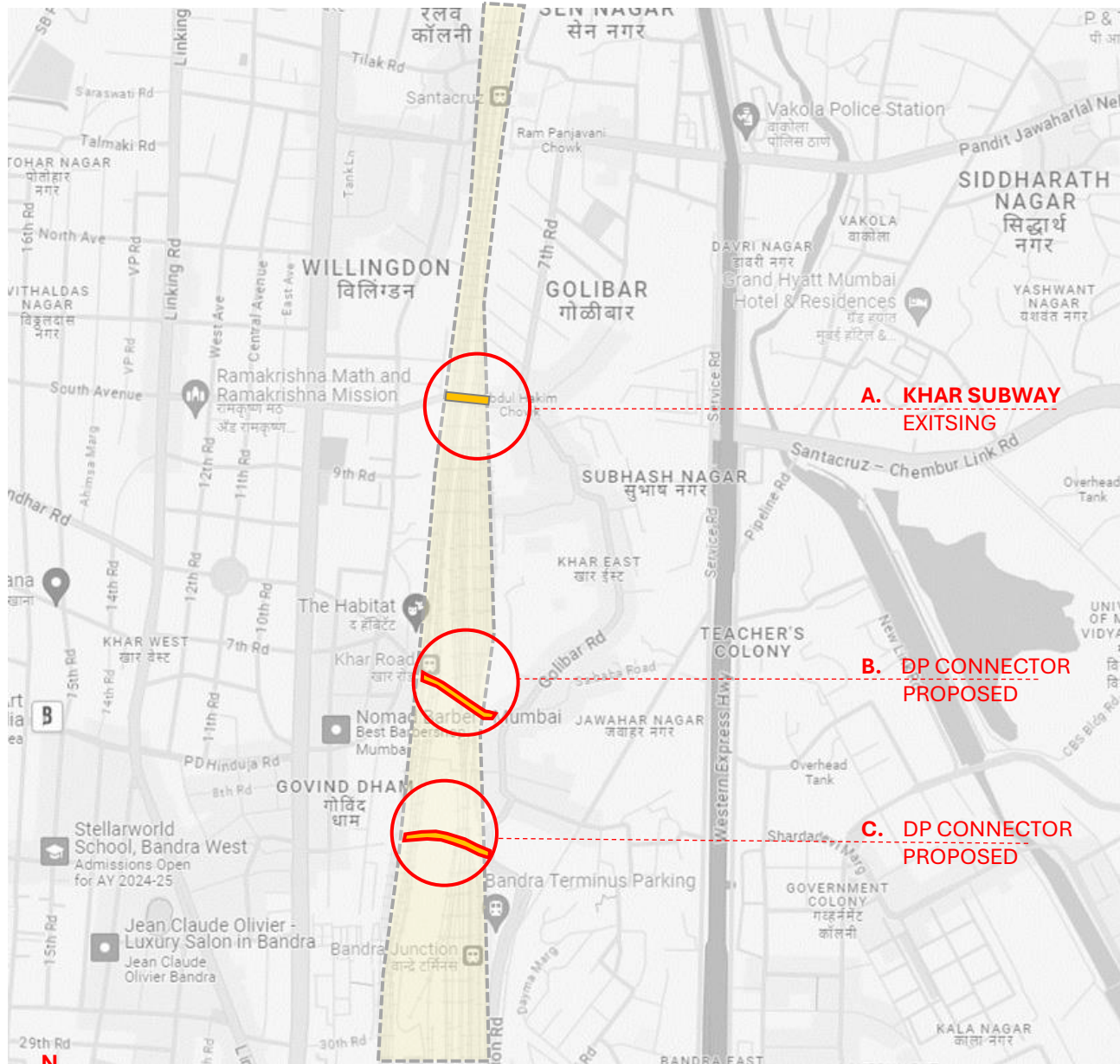


B. DP ROAD PROPOSED: KHAR STATION (WEST)

Implementing this DP Road at Khar would automatically decongest the existing Khar subway and its environs



Connectors

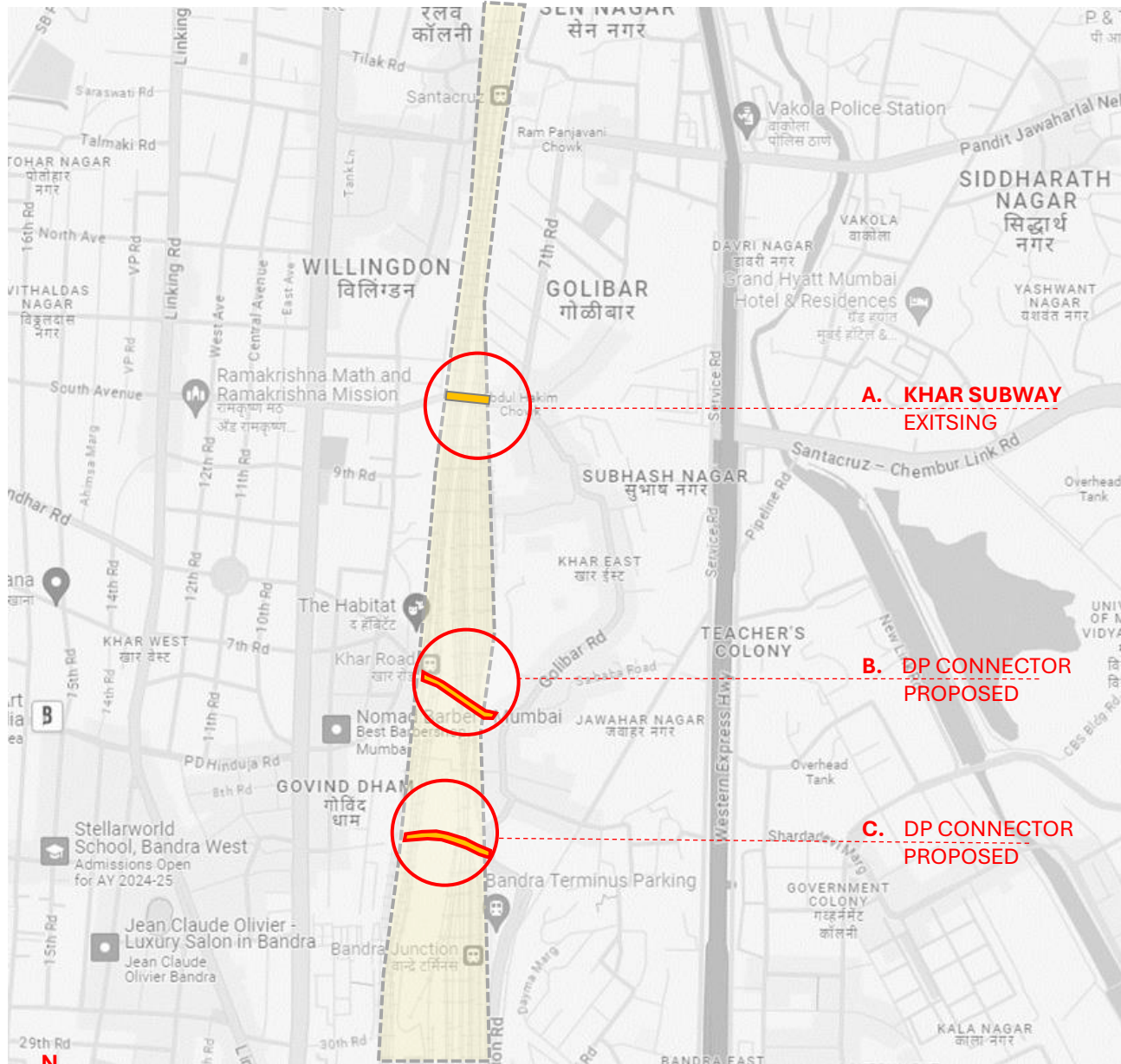


C. DP ROAD PROPOSED: 1st road KHAR (WEST)

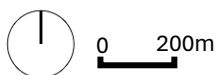
Implementing this DP Road at Khar would automatically decongest the existing Khar subway and its environs. It would also provide an excellent connector to Bandra Terminus. Considering it has been in the DP for so long, it should be implemented.

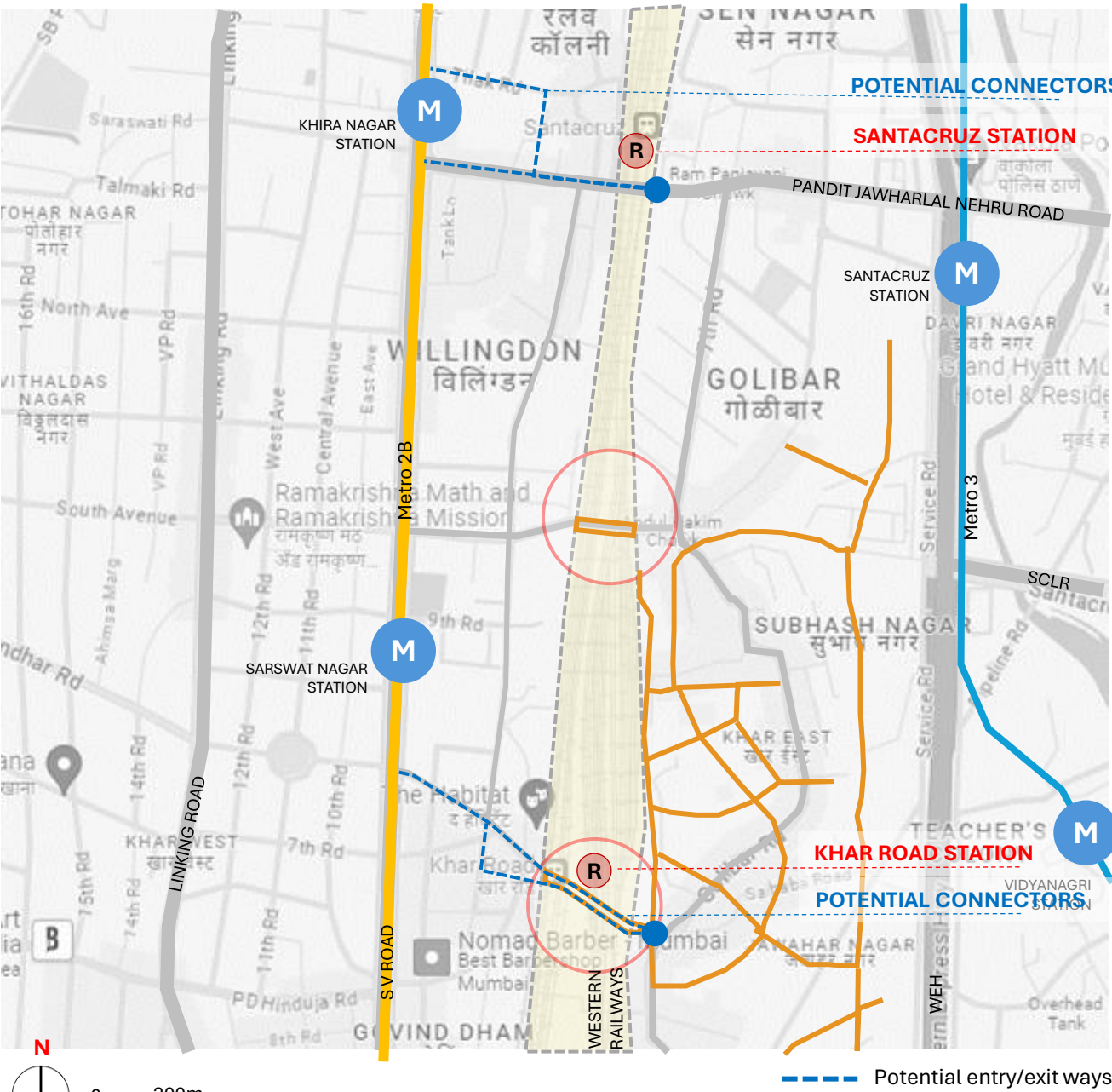


Connectors



C. DP ROAD PROPOSED: 1st road KHAR (WEST)





Potential Connectors

Site Photos



VAKOLA JUNCTION, WEH

The Proposed elevated road lands up BEFORE this junction adding to the traffic and chaos here. Note: It is only a North-bound connector.

Site Photos



7th ROAD, KHAR (EAST)

Light, Air, Trees and Architecture all must yield to the monstrosity of an elevated road. Residents will bear the brunt of the construction and its aftermath.

Site Photos



ABDUL HAKIM CHOWK KHAR (EAST)

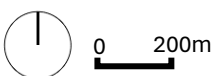
Disorganised traffic and bad road geometry need to be corrected first. These are very small and easy to do.

Site Photos

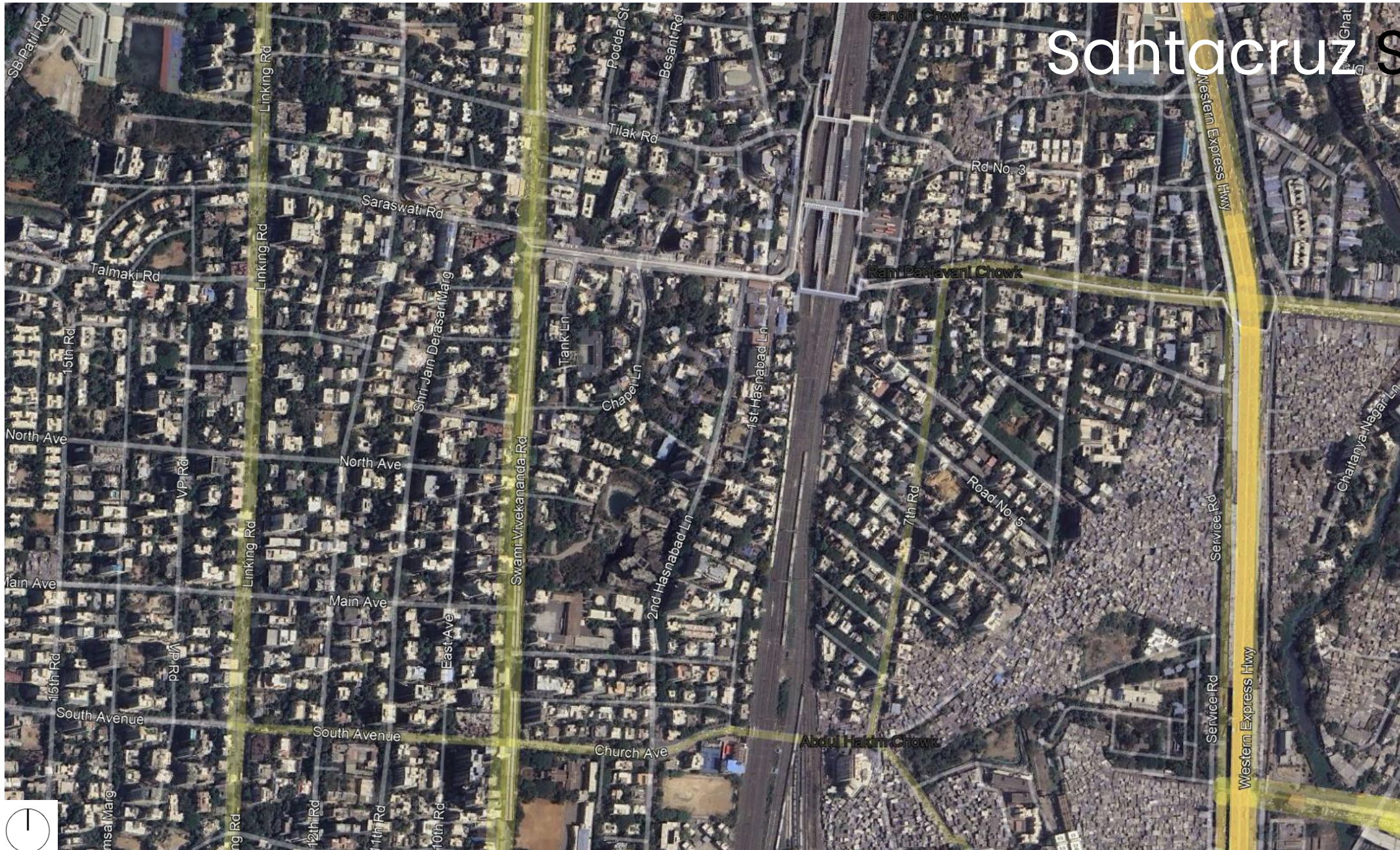


GOLIBAR ROAD KHAR (EAST)

The absence of DP roads, planned yet unbuilt for years does not warrant an ugly, overbearing and expensive overpass.



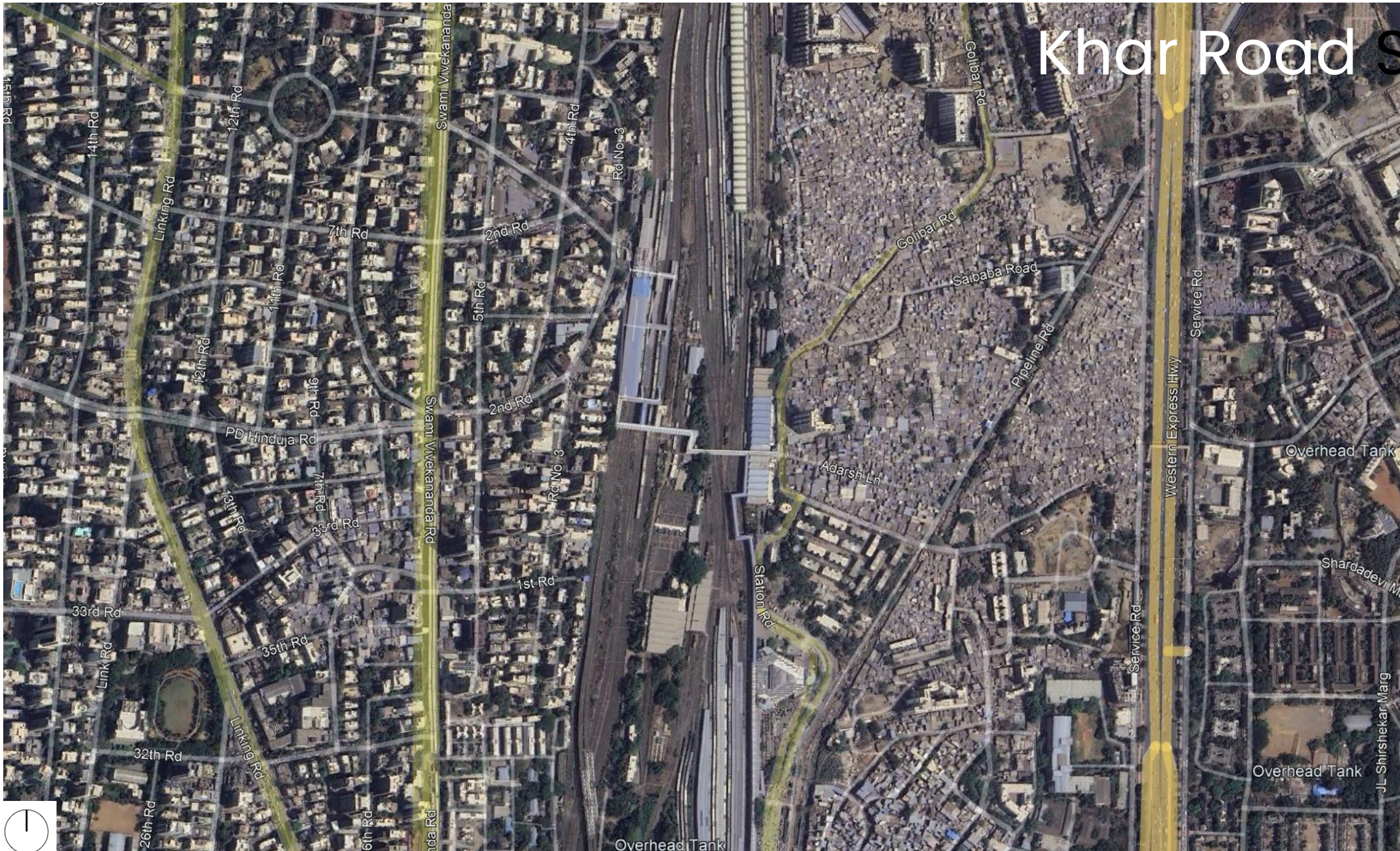
Santacruz Station



DESIGN ANALYSIS **KHAR – SANTA CRUZ ELEVATED ROAD** MUMBAI



Khar Road Station



DESIGN ANALYSIS **KHAR – SANTA CRUZ ELEVATED ROAD** MUMBAI



Conclusion

Community Action

Making sustainable and community-centered design decisions is crucial for a brighter and more resilient urban future. It requires informed and proactive urban planning strategies.

Call to action

Exploring alternative solutions based on urban design principles and DP road construction is crucial for addressing traffic challenges in the area.

Reject the KSER

It's essential to reject the KSER overpass proposal and advocate for simpler yet more effective solutions, such as distributing traffic through multiple connectors rather than concentrating it at one point.

Sustainable Design Decisions

By prioritizing sustainability, efficiency, and community well-being, Mumbai can build a more resilient and vibrant city for all residents

