

MILESTONE AHEAD FOR BULLET TRAIN TUNNEL NATM PART SET FOR SEPT 20 BREAKTHROUGH

WHAT IS NATM

- Unlike machine-driven tunnelling, NATM uses the surrounding ground as a natural support system
- Concrete is sprayed on tunnel walls to stabilise the structure as work proceeds

➤ Package C2, which includes this tunnel, is being executed by Afcons Infrastructure Ltd

The Mumbai-Ahmedabad High Speed Rail project is likely to achieve a major milestone on Saturday with the final breakthrough of its NATM (New Austrian Tunnelling Method) tunnel. Manthan K Mehta reports



BULLET TRAIN CORRIDOR

156km is the Maharashtra section of the entire 508km corridor

135km of elevated track between Shilphata and Zaroli (Maharashtra-Gujarat border)

21km tunnel starting from BKC

THE FULL TUNNEL

Total tunnel length

21km Side tunnel: **394m** (completed)

NATM tunnel
4.9km

Tunnel boring machine stretch
15.5km

NATM TUNNEL

Horseshoe-shaped

Work split in 3 parts

Shilphata stretch

1.6km

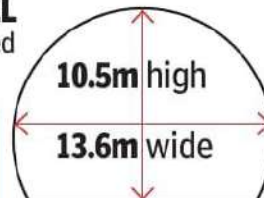
First junction point stretch

1.6km

Second junction point stretch

1.5km

(completed July 2025)



Next milestone

Final breakthrough between Ghansoli and Shilphata on Sept 20, 2025

Challenges

Hard rock strata, low soil cover, utility

WORK STATUS IN MAHARASHTRA

Stations | Work on Thane, Virar, and Boisar stations is progressing. First slabs for Virar and Boisar are complete

BKC station | 83% excavation complete. Base slab casting at 100 ft depth underway at both ends

Viaducts | Pier foundations ongoing across multiple sites; 48 km of piers cast. Full-span box girder launching started in Palghar district

Mountain tunnels | Excavation of 7 tunnels in Palghar underway; 2.1 km of 6 km heading completed

Bridges | Construction has begun on Vaitarna, Ulhas and Jagani river bridges

