

Metro-3: Boring of longest downline tunnel completed



Tunnel boring machine Vaitarna

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Vaitarna has reached its end. We are talking about tunnel boring machine named Vaitarna, which has dug Mumbai's first underground tunnel for the Colaba-Bandra-SEEPZ Metro-3 corridor. On August 2 the TBM completed its longest downline tunnel of 3.814-km from Azad Maidan to Mumbai Central station.

Vaitarna-1 began digging on December 4 and completed in a time span of 20 months at a mining average of 190 meters every month with a diameter of 6.5 meters. "This is the first underground tunnel for a mass transportation project. Vaitarna made its way through hard basalt and breccia rock mass at average depths of below 20 meters from the road level. It marks an important milestone of the 33.5-km long underground Metro-3 corridor," said an official from Mumbai Metro Rail Corporation.

The officials said that there were many operational challenges encountered during this drive as Vaitarna went past many heritage, old and dilapidated buildings. In all, there are 169 structures in the influential zone including 14 high rise buildings and 28 heritage structures.

"The task was challenging and daunting. However, successful completion makes us more confident in completing

DIGGING FACTS

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the project as scheduled. We are also progressing well at station works simultaneously", said Ashwini Bhide, Managing Director, MMRC.

This was the 15th TBM breakthrough witnessed in Colaba-Bandra-SEEPZ Metro-3 corridor. Mumbai Central Metro Station on Metro-3 corridor will provide access to Mumbai Central suburban and Mainline railway station. MMRC, as of today, has completed 31-km of tunneling with 17 Tunnel Boring Machines commissioned through ten TBM shafts.

There are total 12 launching shafts to facilitate tunneling at Cuffe Parade, Eros Cinema, Azad Maidan, Science Museum, Siddhivinayak, Naya Nagar, BKC, Vidyana-gari, Pali Ground, Sariput Nagar, Sahar Road, and International Airport T2 terminal.

The estimated cost of Metro-3 corridor is Rs.30,000 crore. This line is expected to reduce road congestion and the load on the Western line between Bandra and Colaba.