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Delhi Metro Milestone: Longest Twin Tunnel Breakthrough In Phase IV Now Complete

Delhi Metro Rail Corporation (DMRC) has completed the first twin tunnel breakthrough as part of its Phase-IV construction works, an official statement said.

New Delhi: The Delhi Metro Rail Corporation (DMRC) has completed the first twin tunnel breakthrough as part of its Phase-IV construction works, an official statement said. With the twin tunnels stretching approximately 3 kilometres, it is the longest built under this phase of the project, an official statement said.

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According to the official statement, the two tunnel boring machines (TBMs), named Bhoomi and Srishti, emerged simultaneously at Pulbangash Metro Station on Wednesday, marking the completion of the twin tunnels connecting Derawal Nagar to Pulbangash on the Janakpuri West-R K Ashram corridor, an extension of the Magenta line.

"Both TBMs were successfully retrieved at Pulbangash Metro Station on Wednesday, in just over 14 months, covering a length of approximately 2,997 metres, at an average rate of 8.2 metres per tunnel per day. This is also the longest tunnelling drive (almost 3 km) in DMRC's Phase IV works," the statement said.

The event was attended by Dharmendra, Chief Secretary of Delhi, and Dr. Vikas Kumar, Managing Director of DMRC.

Anuj Dayal, Principal Executive Director of Corporate Communications at DMRC, expressed pride in the accomplishment and reiterated the organization's commitment to delivering safe and efficient transport infrastructure for the residents of Delhi.

"Afcons is executing the DC-05 package that includes six underground stations, tunnelling of 14.4km including crossover, 10 cross passages, and 170m open and underground ramp. Today 3 km of twin tunnelling has been completed from Derawal Nagar to Pulbangash," the company said in a statement.

The twin tunnels were excavated at a depth of 14-15 meters, traversing densely populated areas like Rana Pratap Bagh and Punjabi Basti Colony, while also crossing beneath the Najafgarh drain, a zone of structural sensitivity.

Despite the difficulties of tunneling under submerged water conditions and working around the under-construction Ghanta Ghar station, no damage occurred to any surrounding structures, as noted in the statement.

With an internal diameter of 5.8 meters, the tunnels include six cross passages for passenger safety. The civil work for this section was executed by the contractor, M/s Afcons.

The deployment of TBM Bhoomi commenced on June 18, 2023, followed by TBM Srishti on August 19, 2023.