

10km of tunnels left as Metro touches another milestone

Pics: B A Raju

METRO MATTERS

Blue line Green line Metro tunnels under construction

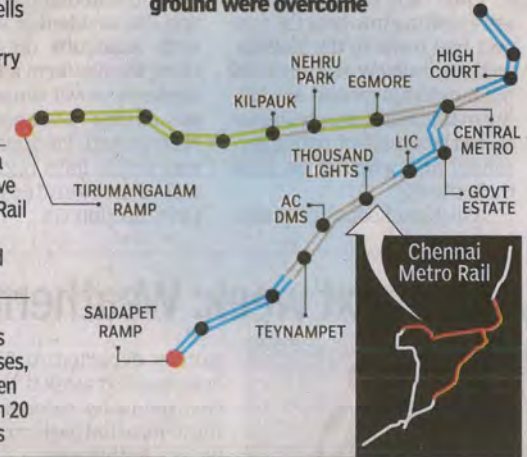
► Since boring was below the water table, machines slowed down

► Undeclared borewells posed a problem as these caused the slurry mix of foam and soil leak out to the surface

► When Pachaiyappa College refused to give campus land, Metro Rail had to change the station's location and tunnel alignment

► Since area to build underground stations was allocated in phases, roads had to be broken and rebuilt more than 20 times in certain areas

The blue and green lines of metro rail have 36km of tunnels. A large part of the ordeal is complete but only after hurdles beneath and above the ground were overcome



Tunnel Travel Can Begin Immediately After Work Is Over, Say Engineers

TIMES NEWS NETWORK

If metro rail's plans go as per schedule, a commuter will be able to board a metro rail train from airport to reach Koyambedu and Egmore railway station – a journey that will take less than 40 minutes – by the end of next year.

A major portion of metro rail network will take shape then as just 10km of tunnels of the 36km underground corridor are left to be completed. Tirumangalam to Egmore underground line via Shenoy Nagar and Airport-Alandur-Little Mount line will be ready for operation.

Metro rail completed 4.6km of tunnels between Shenoy Nagar and Tirumangalam ramp when a boring machine broke through a one-metre thick concrete wall and burst into the work site near Koyambedu on Saturday. This will be the first underground line that will be opened for service. It will connect to the elevated Koyambedu-Alandur stretch which is going to be commissioned by March 2015.

"We will complete tunnels and stations from Shenoy Nagar to Egmore by end of the year and services can be operated in a month or so after the construction is completed. Services can be started immediately on underground section because trains need not be tested for more than a year like it is being done now before start of passenger serv-

ices on Koyambedu-Alandur line. A shorter trial run is planned soon after tunnels are completed along the stretch by June," said R Ramanathan, director, construction, Chennai metro rail.

More than 90% of the boring is completed between Shenoy Nagar and Egmore which is part of the Central-Koyambedu-St Thomas Mount corridor called the Green Line.

However, boring of tunnels is not easy. It took close to two years to complete the 4.6km stretch between Shenoy Nagar and Tirumangalam.

"Tunnelling took time on the stretch as the machines had to be taken out and dragged the whole length of the stations at Anna Nagar East, Anna Nagar Tower and Tirumangalam work sites. The soil was a mix of clay and rock and could be bored quickly unlike in other stretches where the machine encountered rocks, said V K Singh, chief general manager, underground, Chennai metro rail.

He also said that underground stations would not take much time because top level and

concourse level where commuters will buy tickets are complete at most of the stations. "The platform level can be completed at most of the stations by June. This work could not complete because tunnels were being bored. Track laying will start in the tunnels," he added.

Metro rail has started to look ahead as a huge portion of the underground work is being completed. "Detailed project reports are being prepared for the three new lines which has been sanctioned by the state government under the second phase. Ideally, the city should have had 350km of metro rail lines so that all parts of the city could be connected," said Ramanathan.



GROUND ZERO: 1) The tunnel boring machine breaks through a concrete wall to complete the Shenoy Nagar-Tirumangalam ramp stretch on Saturday, 2) Workers celebrate the completion of the longest underground stretch at Tirumangalam, 3) Shenoy Nagar underground station getting ready, 4) A view of an underground station's interior. The walls would bear either green or blue bands to denote which metro rail corridor it falls under